U.S. ARMY CORPS OF ENGINEERS
CIVIL WORKS PROGRAM

CONGRESSIONAL SUBMISSION
FISCAL YEAR 2004

NORTH ATLANTIC DIVISION

Budgetary information will not be released outside the Department of the Army until 3 February 2003

JUSTIFICATION OF ESTIMATE FOR CIVIL FUNCTIONS ACTIVITIES
DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

FISCAL YEAR 2004

NORTH ATLANTIC DIVISION

CORPS OF ENGINEERS

TABLE OF CONTENTS

JUSTIFICATION OF ESTIMATE FOR CIVIL FUNCTION ACTIVITIES
DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

FISCAL YEAR 2004

SUMMARY, NORTH ATLANTIC DIVISION

	FY 2003 Allocation $	FY 2004 Request $	Increase or Decrease $
General Investigations			
Surveys	TBD	7,678,000	TBD
Preconstruction Engineering and Design	TBD	1,522,000	TBD
Subtotal General Investigations	TBD	(9,200.000)	TBD
Construction, General			
Construction	TBD	205,198,000	TBD
Major Rehabilitation	TBD	9.895,000	TBD
Dam Safety Assurance	TBD	0	TBD
Subtotal Construction, General	TBD	(215,093,000)	TBD
Operation and Maintenance, General			
Project Operation	TBD	62,039,000	TBD
Project Maintenance	TBD	150,404,000	TBD
Subtotal Operation and Maintenance	TBD	(212,443,000)	TBD
GRAND TOTAL, NORTH ATLANTIC DIVISION	TBD	436,736,000	TBD

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $

1. SURVEYS – NEW: None.

2. SURVEYS - CONTINUING
   a. Navigation Studies: The amount of $666,000 is requested in fiscal year 2004 for four navigation studies.

MASSACHUSETTS

Boston Harbor New England District	2,101,000	343,000	TBD	500,000	TBD

Boston Harbor is located along the eastern shoreline of Massachusetts and is New England's largest port serving as the principal distribution point for the commerce of Massachusetts, New Hampshire and Vermont. In 2000, waterborne commerce totaled 20.8 million tons, of which approximately 79 percent were liquid petroleum products. The inner harbor has been extensively developed for water transportation and is comprised of the Main Ship, Reserved, Chelsea River and Mystic River Channels. The Massachusetts Port Authority (Massport) has been upgrading facilities at Conley Terminal, which is located along the southerly side of the Reserved Channel, to accommodate larger container vessels and improve operational efficiency of the harbor. In addition, Massport has plans to expand Conley Terminal onto the adjacent Coastal Oil Terminal property and to develop a bulk cargo terminal at nearby North Jetty Terminal, increasing the number of berths that would benefit from deeper channels. The Port of Boston Competitiveness Task Force Report, dated December 1998, concluded that the channels accessing Conley Terminal must be dredged to at least 45 feet for New England companies to remain competitive by receiving containerized cargo by direct ocean going service. This becomes increasingly important with the next generation of container ships, drawing 45 feet or more, now entering service. These ships now make 3 calls a week to Boston Harbor. Navigation improvements to deepen portions of Boston Harbor to at least 45 feet would increase the efficiency of harbor operations and reduce tidal delays for larger vessels. The feasibility cost-sharing agreement was executed on June 27, 2002 with Massport.

The reconnaissance report, certified in August 2001, recommended feasibility phase studies to evaluate deepening the Main Ship, Reserved, and Entrance Channels to 45 feet. Fiscal Year 2003 funds are being used to continue the feasibility phase, including sediment sampling and testing and remote surveys for geotechnical and cultural resources scoping. Funds requested for Fiscal Year 2004 will be used to continue the feasibility phase, including biological sampling and testing, economic analysis and channel design. The estimated cost of the feasibility phase is $4,034,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$4,118,000
Reconnaissance Phase (Federal)	84,000
Feasibility Phase (Federal)	2,017,000
Feasibility Phase (Non-Federal)	2,017,000

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
The reconnaissance phase was completed in June 2002. The feasibility study schedule is being determined.					
NEW YORK					
Lake Montauk Harbor New York District	1,450,000	584,000	TBD	85,000	TBD

Lake Montauk Harbor, located about 120 miles east of the Battery New York City, is on the south fork of Long Island in the Town of East Hampton, Suffolk County, New York. It is the only harbor of refuge for nearly 50 miles in this area. The existing Federal project provides a channel 12-foot deep at mean low water, 150 feet wide for an approximate length of 3700 feet; a boat basin 10 feet deep, 400 feet wide for an approximate length of 900 feet; and two jetties with sport fishing facilities. Local interests maintain that the authorized 12-foot project is inadequate for current commercial vessels forcing some deeper draft vessels to wait for higher tides in order to pass safely through the channel. In addition, deterioration of the eastern jetty is allowing sand to migrate into the authorized channel increasing Federal maintenance costs.

A reconnaissance report, completed in May 1995, determined that there is federal interest to proceed to the feasibility phase of study and recommended further studies of a $4,900,000 project to deepen the existing channel and provide shoreline protection through beneficial use of dredged material and sand bypassing. In addition, environmental restoration opportunities at two sites were identified. The feasibility study will evaluate alternative plans to determine the national economic development plan for the project. The New York State Department of Environmental Conservation is the potential local sponsor for the feasibility study and fully understands the cost sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement schedule is being determined.

The Section 905 (b) analysis was certified to be in accord with policy in November 2002. Fiscal Year 2003 funds will be used to initiate the feasibility phase of the study, including data collection and coordination with local interest. The funds requested for Fiscal Year 2004 will be used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses to establish baseline conditions. The preliminary estimated cost of the feasibility phase is $2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,450,000
Reconnaissance Phase (Federal)	450,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (non-Federal)	1,000,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Hudson River Habitat Restoration New York District	2,399,000	1,082,000	TBD	25,000	TBD

The study area extends about 155 miles from the southern limit of the State Barge Canal at Waterford, New York to the Battery in New York City. The study will address the restoration of fish and wildlife resources.

The River and Harbor Act of 1910 authorized a 12-foot navigation channel for the Hudson River, New York -- New York City to Waterford. The project was modified by the River and Harbor Acts of 1935 and 1938, which authorized deepening of the channel to 32 feet to the Federal Lock at Troy New York, and 14 feet to the southern limit of the State Barge Canal at Waterford. Prior to this project, a series of low profile dikes were constructed by the Corps to create a stable channel for deep-draft navigation between New York City and the Port of Albany, and for barge traffic to the New York State Barge Canal System. Dredging the channels by the Corps over the past one hundred years has produced approximately 83,000,000 cubic yards of dredged material, which was disposed of in embayments, marshes, backwaters, and secondary channels behind islands. The dredged material was also used to construct new islands, extend and/or connect existing islands, filling in additional wetland and aquatic habitats. Since 1891, approximately 2,800 acres of wetland and aquatic habitat have been lost and 60 miles of shallow habitat deepened. Striped bass, Shad, Atlantic sturgeon and herring use the shallows and wetland habitat for spawning and as a primary nursery during their critical developmental stages. The river also contains a rare stable population of the endangered Shortnose sturgeon, and certain of the effected habitat are critical for its survival. The National Marine Fisheries Service, U.S. Fish and Wildlife Service, Museum of the Hudson Highlands, Nature Conservancy, Audubon Society, Scenic Hudson, Open Space Initiative, electric utilities and railroads support habitat restoration.

The reconnaissance report found that measures such as reestablishing wetlands and aquatic habitat, and removal of barriers to fish migration at the estimated implementation cost of $23,000,000 warranted further study for fourteen sites. These sites will be addressed in the following, The Combined Sites Interim Report will address Schodack Island Complex, Mill Creek Wetlands, and Manitou Marsh. The Upper Reach and Spuyten Duyvel Interim Report will address Hudson North Bay, Ramshorn Marsh, Imbought Bay, and Spuyten Duyvel. The Lower Reach Interim Report will address Cornwall Bay/Moodna Creek, Annsville Creek/Peekskill Bay, and Croton Point to New York Harbor. The National Estuarine Research Reserve Interim Report, which will be the final feasibility report, will address Tivoli North Bay, Iona Marsh, and Piermont Marsh. The feasibility cost-sharing agreement was executed on April 30, 1996 with the New York State Department of Environmental Conservation and New York State Department of State.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $

Hudson River Habitat Restoration
New York District

Prior Year funds are being used to complete the Combined Sites Interim feasibility report and initiate the Upper Reach and Spuyten Duyvel Interim feasibility report. The funds requested for Fiscal Year 2004 will be used to continue the feasibility studies for the Upper Reach and Spuyten Dyvel feasibility report. The estimated cost of the feasibility phase is $4,048,000, which is to be shared on a 50-50 percent basis by Federal and Non-Federal interests. A summary of the cost sharing is as follows:

Total Estimated Study Cost	$4,423,000
Reconnaissance phase (Federal)	375,000
Feasibility phase (Federal)	2,024,000
Feasibility phase (Non-Federal)	2,024,000

The reconnaissance phase was completed in April 1996. The interim feasibility study schedules are being determined for the Combined Sites, the Upper Reach and Spuyten Duyvel, and the Lower Reach, interims, as well as the final feasibility report, the Nation Estuarine Research Reserve Interim.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
VIRGINIA					
Norfolk Harbor and Channels, Craney Island Norfolk District	3,050,000	2,700,000	TBD	56,000	TBD

The Craney Island Dredged Material Management Area (CIDMMA) is a 2,500-acre man-made containment area located along the south bank of the James River in Portsmouth, Virginia. It was authorized by the River and Harbor Act of 1946 and constructed from 1956 through 1958. Craney Island is Federally owned and operated and is used by private interests, local municipalities, and Federal and Commonwealth Government agencies for disposal of dredged material from Norfolk Harbor and adjacent waterways. The main containment site consists of a diked area with six spillways. There is also a rehandling basin to the southeast of the containment area that is used by bottom-dump scows and other vessels that do not have pump-out capabilities. About every two years, the rehandling basin reaches its capacity. This material is then hydraulically dredged and pumped into the containment area. The containment area, divided into three cells, is part of a management plan for the effective operation of the area. The Virginia Port Authority, an agency of the Commonwealth of Virginia, has expressed interest to create a fourth cell at the CIDMMA by expanding the containment area to the east. The new cell will extend the useful life of the CIDMMA and provide an area that could be developed as a long-term berthing and port facility adjacent to the Norfolk Harbor Channel. The Virginia Port Authority and maritime officials state that additional port facilities are needed based on increased vessel traffic projections through 2010-2015. In addition, the Commonwealth of Virginia has formed a Craney Island Study Committee to address issues regarding the future use and development of the CIDMMA. The feasibility cost-sharing agreement was executed in April 1999 with the Virginia Port Authority.

Fiscal Year 2003 funds are being used to continue the feasibility phase of study, including engineering, economic, cultural, environmental, and real estate investigations, and local coordination. Fiscal Year 2004 funds will be used to prepare the final feasibility report. The estimated cost of the feasibility phase is $5,900,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$6,000,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,950,000
Feasibility Phase (Non-Federal)	2,950,000

The reconnaissance phase was completed in April 1999. The feasibility study schedule is being determined.

Subtotal Navigation Studies - Continuing	9,000,000	4,709,000	TBD	666,000	TBD

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
2. SURVEYS – CONTINUING					
b. Flood Damage Prevention Studies: The amount of $1,535,000 is requested in fiscal year 2004 for ten flood damage prevention studies.					
MARYLAND					
Anacostia River and Tributaries, Prince George's County Levee, MD & DC Baltimore District	1,453,000	1,051,000	TBD	194,000	TBD

The Anacostia River has a total drainage area of 170 square miles, of which 136 square miles are in Maryland, and 34 square miles are in the District of Columbia. The Northeast and Northwest Branches originate in Maryland and flow through several highly urbanized areas before forming the Anacostia River about nine miles upstream from its junction with the Potomac River. The Corps of Engineers' involvement in the basin dates back more than 115 years and includes projects and programs for navigation, flood control, debris removal, and aquatic vegetation control. Two major projects were undertaken. From 1902 through 1940, the District of Columbia portion of the river was channelized, seawalls were built, Kingman Lake and East Lake were constructed, and more than 1,000 acres of mudflats and wetlands were filled with dredged material. The primary purpose of this work was to provide a park for the eastern portion of the city. From 1952 to 1959, a flood control project was constructed in Prince George's County, Maryland, along the Northeast and Northwest Branches, and the Anacostia River. A total of 28,000 feet of levees and 14,000 feet of channels were constructed to solve critical flood problems. This effort was successful; however, the construction resulted in a further loss of wetlands and fish and wildlife habitat. A reconnaissance study for the Anacostia River and Tributaries, completed in December 1991, identified extensive potential Federal involvement in the Anacostia watershed restoration effort. This reconnaissance study recommended that additional feasibility studies be conducted at numerous sites in the Anacostia area. Prince George’s County Levee is the third feasibility study from the reconnaissance effort, and will investigate improving the existing local flood protection levee in Prince George's County and restoring the environment through wetland creation and restoration. According to a recent County study, the levees do not currently provide 100-year level of protection under existing conditions nor do they have the required 3-foot freeboard above the 100-year flood elevation. The non-Federal sponsors for this third study are Prince George's County and the Maryland-National Capital Park and Planning Commission. The feasibility cost-sharing agreement was executed in January 1999.

Fiscal Year 2003 funds are being used to continue the feasibility phase, including final plan formulation and preparation of the draft feasibility report. The funds requested for fiscal year 2004 will be used to prepare the feasibility report. The estimated cost of the feasibility phase is $2,706,000, which is to be shared on a 50-

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Anacostia River and Tributaries, Prince George's County Levee, MD & DC Baltimore District					

50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,806,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,353,000
Feasibility Phase (Non-Federal)	1,353,000

The reconnaissance phase for the Prince George’s County Levee area was completed in January 1999. The Prince George’s County Levee feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW JERSEY					
Goffle Brook, Borough of Hawthorn New York District	1,600,000	63,000	TBD	25,000	TBD

The study area encompasses Goffle Brook and its secondary tributaries that empty into the Passaic River. The study will focus on the flooding problems in the Boroughs of Hawthorne, Passaic County, and Wedland Park, Bergen County, New Jersey, which are suburban in nature with many residential homes and some commercial development. Many of the residences and commercial properties located in the study area are on the 100-year floodplain and experience severe flooding from hurricanes and nor'easters, along with flooding from back-up floods from the Passaic River. In addition, the ecosystem along Goffle Brook has suffered environmental degradation from over development and streambank erosion.

The reconnaissance study is assessing if there is a Federal interest to pursue further studies during the feasibility phase to determine potential solutions for flood damage reduction, streambank erosion, as well as opportunities for environmental restoration. The New Jersey Department of Environmental Protection and the Borough of Hawthorne are the potential local sponsors, who fully understand the cost-sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement schedule is being determined.

Fiscal Year 2003 funds are being used to complete the reconnaissance phase at full Federal expense. If the Section 905 (b) analysis is certified to be in accord with policy, the funds requested for fiscal year 2004 will be used to initiate the feasibility phase of the study, including data collection and local coordination. The preliminary estimated cost of the feasibility phase is $3,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the cost sharing is as follows:

Total Estimated Study Cost	$3,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Peckman River Basin New York District	2,300,000	63,000	TBD	200,000	TBD

The study is located within the Peckman River Basin is in Essex and Passaic Counties, New Jersey. The Peckman River originates in the Town of West Orange and flows through the towns of Verona, Cedar Grove, and Little Falls, New Jersey, to its confluence with the Passaic River in West Paterson, New Jersey, draining an approximate area of 10 square miles. Within these towns, 220 homes and businesses are subject to flooding problems by the Peckman River and backwater from the Passaic River.

The reconnaissance study found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility phase is evaluating potential solutions for flood damage reduction measures, as well as ecosystem restoration measures. The feasibility cost-sharing agreement was executed in March 2002 with the New Jersey State Department of Environmental Protection.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study, including data collection and preliminary assessments of existing baseline conditions. The funds requested for fiscal year 2004 will be used to continue the feasibility phase of the study, including plan formulation, problem identification and local coordination. The estimated cost of the feasibility phase is $4,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$4,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,200,000
Feasibility Phase (Non-Federal)	2,200,000

The reconnaissance phase was completed in March 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Rahway River Basin New York District	3,280,000	335,000	TBD	150,000	TBD

The Rahway River basin study area encompasses an 81.9 square mile area in northeastern New Jersey about 15 miles west of the Battery New York City. The Rahway River flows southerly through Essex and Union Counties, then easterly through Union and Middlesex Counties from the City of Rahway discharging into the Arthur Kill near Carteret, New Jersey. The area is urban to suburban in nature.

Frequent flooding occurs along the Rahway River in Essex, Union, and Middlesex Counties. Flooding problems from fluvial and tidal storm surges have worsened due to extensive development in the area. Major storms of record occurred in July 1938, May 1968 (10 year flood), August 1971 (15 year flood), August 1973 (60 year flood), July 1975 (50 year flood), June 1992 (15 year flood), October 1996 (75 year flood), July 1997 (50 year flood), and most recently September 1999 Hurricane Floyd (500 year flood). Major damage centers include Springfield, Cranford, Rahway, Maplewood, and Millburn. In addition to the flooding problems, ecologic problems exist that include loss and degradation of tidal wetlands, pollution and sedimentation problems. Many denuded mud flats exist where phragmites has replaced spartina as the dominant plant. Numerous petroleum facilities align the Rahway River in the vicinity of its confluence with the Arthur Kill. Past sediment analyses have shown that petroleum products and heavy metals are prevalent downstream of the river.

The reconnaissance study, completed in July 1999, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study is evaluating flood damage reduction measure, such as channel improvements, diversion tunnels and detention ponds along the South Branch of the Rahway River, and levees and floodwalls along the Robinson's Branch of the Rahway River. In addition, the feasibility study is evaluating ecosystem restoration for wetlands along the Rahway River in the City of Rahway and the Town of Cranford. The feasibility cost sharing agreement was executed in March 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2003 funds will be used to continue the feasibility phase of the study, including data collection and local coordination. The funds requested for fiscal year 2004 will be used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The estimated cost of the feasibility phase is $6,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$6,480,000
Reconnaissance Phase (Federal)	80,000
Feasibility Phase (Federal)	3,200,000
Feasibility Phase (Non-Federal)	3,200,000

The reconnaissance phase was completed in March 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Shrewsbury River and Tributaries New York District	1,900,000	347,000	TBD	150,000	TBD

The Shrewsbury River and its tributaries, located in northern Monmouth County, New Jersey, drain into the Raritan and Sandy Hook Bays about 35 miles southwest of the battery New York City. The tidal estuary is protected by the Sandy Hook peninsula and nearby barrier beaches. This area is urban to suburban in nature with several heavily populated towns.

Frequent storms, hurricanes, and northeasters produce storm surges that back up the normal river flow causing damages to residential, commercial, and municipal buildings. Monmouth Beach and Seabright, New Jersey, are major damage centers, where buildings sustained serious damages from flooding caused by storms in December 1992 and October 1996. Some buildings were flooded to the first floor levels and above. Furthermore, the ecological productivity of the coastline and riverine wetlands are degrading along the Shrewsbury River and its tributaries due development, streambank erosion, and dredging activities.

The reconnaissance study, completed in August 2001, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility phase is evaluating potential flood control measures in Sea Bright and Monmouth Beach, New Jersey, as well as opportunities for environmental restoration to protect coastline and riverine wetlands along the islands in the Shrewsbury River, the Navesink delta, and Little Silver Creek. The feasibility cost-sharing agreement was executed in August 2001 with the New Jersey Department of Environmental Protection.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The funds requested for fiscal year 2004 will be used to continue the feasibility phase of the study, including additional data gathering and analysis, plan formulation, and environmental analyses. The estimated cost of the feasibility phase is $3,600,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,800,000
Feasibility Phase (Non-Federal)	1,800,000

The reconnaissance phase was completed in August 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Upper Rockaway River New York District	1,400,000	707,000	TBD	441,000	TBD

The Upper Rockaway River is located in Morris County, New Jersey. It drains an approximate 116 square mile area above Boonton Reservoir. The river ultimately drains to the Passaic River. Several municipalities in the basin are susceptible to flooding. They include Wharton, Dover, Rockaway, Denville, and Boonton. There are over a 1,000 structures in the floodplain in Denville and Dover alone. The flooding is caused by insufficient channel capacity and development in the floodplain. Major flooding has occurred in May 1968, September 1971, February and December 1973, March 1977, January 1979, April 1984, October 1996, and September 1999. The October 1996 storm flooded about 200 homes and businesses. In the Township of Denville, many roads were under a foot of water or more. Several bridges, including Savage Road Bridge and Diamond Spring Road Bridge, were washed out. In the Township of Boonton, water levels were several feet above the first floor of many residential properties and residents of six homes were evacuated. In addition, stream bank erosion in some sections of the river has contributed to a degraded ecosystem.

The reconnaissance study found there is a Federal interest to proceed to the feasibility phase of the study. The Upper Rockaway River feasibility study is evaluating measures for flood protection and environmental restoration, as well as the creation of new wetlands in the basin. The feasibility cost-sharing agreement was executed on May 27, 1999 with the State of New Jersey Department of Environmental Protection.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study, including identification and design of alternatives, environmental assessments, public involvement, and local coordination. Fiscal Year 2004 funds will be used to complete the feasibility phase of the study, including preparation of the feasibility report. The estimated cost of the feasibility phase is $2,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$2,700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,300,000
Feasibility Phase (Non-Federal)	1,300,000

The reconnaissance phase was completed in May 1999. The feasibility study is scheduled for completion in March 2004.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Woodbridge River Basin New York District	1,730,000	323,000	TBD	150,000	TBD

The study area encompasses the Woodbridge River Basin located in northeastern New Jersey about 18 miles southwest of the Battery New York City. The 5 miles long Woodbridge River flow easterly through Middlesex County, New Jersey, and discharges into the Arthur Kill. The area is entirely developed and is suburban and industrial in nature.

Frequent flooding occurs along the Woodbridge River in Middlesex County. Flooding problems from fluvial and tidal storm surges have worsened due to extensive development in the area. Major storms of record occurred in July 1938, May 1968 (10 year flood), August 1971 (15 year flood), August 1973 (60 year flood), July 1975 (50 year flood), June 1992 (15 year flood), October 1996 (75 year flood), July 1997 (50 year flood), and most recently September 1999 Hurricane Floyd (500 year flood). Major damage centers includes the Sewaren section of Woodbridge Township and Perth Amboy. In addition to the flooding problems, ecologic problems exist that include loss and degradation of tidal wetlands, pollution and sedimentation problems. Many denuded mud flats exist where phragmites has replaced spartina as the dominant plant. Petroleum facilities align the Woodbridge River in the vicinity of its confluence with the Arthur Kill. Past sediment analyses have shown that petroleum products and heavy metals are prevalent downstream of the river.

The reconnaissance study, certified in July 1999, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study is evaluating flood damage reduction measures for non-structural solutions, such as buyouts, and structural measures, such as levees, floodwalls and streambank modifications, in the Township of Woodbridge. Ecosystem restoration, such as streambank stabilization and wetlands creation along the Woodbridge River, are also being evaluated. The feasibility cost-sharing agreement was executed in March 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2003 funds will be used to continue the feasibility phase of the study, including data collection and local coordination. The funds requested for fiscal year 2004 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The estimated cost of the feasibility phase is $3,300,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interest. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,380,000
Reconnaissance Phase (Federal)	80,000
Feasibility Phase (Federal)	1,650,000
Feasibility Phase (Non-Federal)	1,650,000

The reconnaissance phase was completed in March 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW YORK					
Bronx River Basin New York District	2,350,000	240,000	TBD	50,000	TBD

The study area for the Bronx River Basin is located in central Bronx County and lower Westchester County, New York. The Bronx River drains an approximate 56.4 square mile area. The river and its tributaries carry large amounts of sediment that are deposited in the lower reaches at river bends and bridges which leads to flooding during storms that produce high flow events. Major damage centers include the Towns of North Castle, Scarsdale, Mount Pleasant, and Greenburgh; and the Cities of Yonkers, White Plains, and Mount Vernon. In addition to flooding problems, environmental degradation of the Bronx River affects the water quality and fish and wildlife habitats of the watershed.

The reconnaissance study, certified in January 2001, found there is a Federal interest to proceed to the feasibility phase and recommended further studies for potential flood damage prevention measures, ecosystem restoration opportunities for 18 sites along the Bronx River. The reconnaissance study also recommended a comprehensive basin-wide watershed plan to identifying non-structural measures for ecosystem restoration. The potential local sponsors are the New York City Department of Environmental Protection and the Westchester County Department of Parks, Recreation, and Conservation, who fully understand the cost-sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement schedule is being determined.

The Fiscal Year 2003 funds, along with prior appropriated funds for the feasibility phase of the study, will be used to initiate the feasibility study, including data collection and coordination with local interests. The funds requested for fiscal year 2004 will be used to continue the feasibility phase of the study, including formulation of alternatives. The preliminary estimated cost of the feasibility study is $4,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	2,250,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Freeport Creek, Village of Freeport New York District	1,600,000	112,000	TBD	25,000	TBD

The study area includes Freeport Creek and its tributaries in the Village of Freeport, New York, which is located on the south shore of Long Island approximately 20 miles east of the Battery New York City. The area is urban to suburban with over 1700 residential and commercial structures are subject to flooding from storm events, such as northeastern storms and hurricanes, and the remaining tidal ecosystem along the waterfront area has suffered environmental degradation from over development and erosion.

The reconnaissance study, completed September 2001, found there is a Federal interest to proceed to the feasibility phase of the for potential solutions for flood damage protection measures along Freeport Creek and its tributaries. The New York State Department of Environmental Conservation and the Village of Freeport are the potential local sponsors for the feasibility study who fully understand the cost sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement schedule is being determined.

The Section 905 (b) analysis was certified to be in accord with policy in December 2001. The funds for fiscal year 2003 will be used to initiate the feasibility phase of the study, including data collection and coordination with local interest. Fiscal Year 2004 funds will be used to continue the feasibility phase of the study, including data collection and preliminary assessments of existing baseline conditions for plan formulation. The preliminary estimated cost of the feasibility phase is $3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$3,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
VIRGINIA					
Fourmile Run Baltimore District	800,000	63,000	TBD	150,000	TBD

The study area is located in the City of Alexandria and in Arlington County, Virginia, on the Fourmile Run immediately above its confluence with the Potomac River. Fourmile Run drains an approximate 19 square-mile area from Brilyn Park, Fairfax County, Virginia, and flows southeasterly through Fairfax and Arlington Counties, and the City of Alexandria to its confluence with the Potomac River across from Washington, D.C.

A flood control project in the City of Alexandria, Virginia, completed in 1984, provides an improved channel, floodwall-protection system, and replaced two highway and four railroad bridges near Fourmile Run's confluence with the Potomac River. The project protects the area against a 100-year fluvial flood on Fourmile Run and provides recreational areas, including pedestrian and bike trails.

A reconnaissance report, certified in October 2002, found that there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study will further evaluate potential solutions for flood damage reduction measures, as well as ecosystem restoration measures for the following: wetland creation and restoration; floodplain restoration; fish and wildlife habitat restoration, channel modification, beneficial use of dredged material; land acquisition; a master plan for restoring and protecting the natural infrastructure; and additional flood damage reduction measures. The potential sponsors for the feasibility phase of the study are the City of Alexandria and Arlington County, who fully understand the cost-sharing requirements for the study. The feasibility cost-sharing agreement schedule is being determined.

Fiscal Year 2003 funds are being used to complete the reconnaissance phase at full federal expense, and initiate the feasibility phase of the study. The funds requested for fiscal year 2004 will be used to continue the feasibility phase of the study, including data gathering, economic and environmental analyses, and public coordination. The preliminary estimated cost of the feasibility phase is $1,400,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	700,000
Feasibility Phase (Non-Federal)	700,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Subtotal Flood Damage Prevention Studies - Continuing	18,395,000	3,304,000	TBD	1,535,000	TBD

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
2. SURVEYS - CONTINUING					
c. Shoreline Protection Studies: The amount of $1,651,000 is requested in fiscal year 2004 for ten shoreline protection studies.					
MARYLAND					
Chesapeake Bay Shoreline Erosion, MD, VA, & PA Baltimore District	5,700,000	150,000	TBD	200,000	TBD

The study area includes the Chesapeake Bay and tributaries in the state of Maryland, and the Commonwealths of Virginia and Pennsylvania, draining some 20,000 square miles along the east coast of the United States. The area is rural in the northern and southern portions of the watershed, and urban to suburban in the center portions of the watershed.

In the past, many navigation, flood control, environmental, and site-specific shoreline protection projects have been constructed in the Chesapeake Bay. However, a comprehensive review has never been conducted to determine the affect of these projects on the Chesapeake Bay's ecology. Furthermore, no studies have been undertaken to recommend potential solutions for sediment build-up behind the dams on the Lower Susquehanna River. This study will evaluate all existing Chesapeake Bay projects and activities to develop a holistic approach to address future problem areas and identify future navigation, flood control, ecosystem restoration, and shoreline protection measures that may be recommended by Federal or non-Federal entities within Chesapeake Bay.

The reconnaissance study is assessing if there is a Federal interest for further feasibility studies to evaluate potential solutions that could be undertaken to alleviate the sediments behind the dams on the Lower Susquehanna River, as well as erosion reduction measures along the Bay's shorelines, shoaling of navigation channels, sediment transport into the Bay, submerged aquatic vegetation restoration, and fish and wildlife habitat restoration. The potential non-Federal sponsor(s) for the feasibility phase of the study are the Susquehanna River Basin Commission, the Commonwealths of Pennsylvania and Virginia, and the State of Maryland, who fully understand the cost-sharing requirements for the feasibility study that may follow the reconnaissance study. The feasibility study cost sharing agreement schedule is being determined.

Fiscal Year 2003 funds are being used to continue the Section 905(b) analysis, coordinate with the non-Federal sponsors and negotiate and execute the feasibility study cost sharing agreement. If the Section 905(b) analysis is certified to be in accord with policy, the funds requested for fiscal year 2004 will be used to continue

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $

Chesapeake Bay Shoreline Erosion, MD, VA, & PA
Baltimore District

into the feasibility phase of the study, including data gathering, economic and environmental analyses, and public coordination. The preliminary estimated cost of the feasibility phase is $10,400,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$10,900,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	5,200,000
Feasibility Phase (Non-Federal)	5,200,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW JERSEY					
New Jersey Shoreline, Alternative Long-Term Nourishment Study Philadelphia District	2,062,000	64,000	TBD	100,000	TBD

The study area includes over 120 miles of Atlantic Ocean coastline from Sandy Hook to Cape May Inlet, New Jersey. Presently, there are three Federally authorized beach fill projects constructed, an additional two projects are under construction, and a potential eight additional ocean-front projects could be constructed within the next five years. The ultimate project costs for these combined projects total over $2 billion.

A reconnaissance study, the New Jersey Shore Protection Study, was completed in September 1990. The study found there is a Federal interest to proceed to feasibility studies and recommended further studies for potential shoreline protection projects along the Atlantic coast of New Jersey.

The feasibility study will evaluate methods to manage New Jersey's coastal projects on a regional basis to ensure maximum benefits are achieved from the large Federal investment and to reduce long-term periodic nourishment costs. The study is developing a regional sediment budget plan; an improved understanding of regional coastal processes; an efficient regional monitoring program; and a comprehensive beach, inlet and borrow area management strategies plan. The feasibility study will be coordinated with the New Jersey Department of Environmental Protection, the National Marine Fishery Service, and the U.S. Fish and Wildlife Service. The feasibility cost-sharing agreement was executed in December 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2003 funds are being used to initiate the feasibility phase of the study, including the plan formulation process, data collection and coordination with local interests. The funds requested for fiscal year 2004 will be used to continue the feasibility phase, including data collection, coastal process modeling, and sand transport modeling. The estimated cost of the feasibility phase is $4,024,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$4,074,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	2,012,000
Feasibility Phase (Non-Federal)	2,012,000

The reconnaissance phase was completed in December 2002. The feasibility study completion is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
New Jersey Shore Protection, Hereford to Cape May Inlet Philadelphia District	1,275,000	35,000	TBD	100,000	TBD

The study area is located in Cape May County along New Jersey's last coastal barrier island between Hereford Inlet and Cape May Inlet. This area includes the Towns of North Wildwood, Wildwood and Wildwood Crest. Coastal storms and tidal surges cause major damages to businesses, residences, and small marinas in these towns due to the low-lying topography of the beaches and lack of a dune system. In addition, accretion of the shoreline along the southern end of the barrier island near Cape May Inlet is increasing the dredging requirements for the Federal navigation channel, where there is a U.S. Coast Guard Receiving Center.

A reconnaissance study, the New Jersey Shore Protection Study, was completed in September 1990. This study found there is a Federal interest to proceed to feasibility studies and recommended further studies for potential shoreline protection projects along the Atlantic coast of New Jersey, which included the Hereford Inlet to Cape May Inlet area.

The feasibility phase is evaluating shoreline protection measures, including sand bypassing measures, as well as opportunities for ecosystem restoration for the back-bay areas to improve fish and wildlife habitats and restore wetlands. The feasibility cost-sharing agreement was executed in September 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2003 funds are being used to initiate the feasibility phase of the study, including data collection, formulation of alternative plans, and coordination with local interests. The funds requested for fiscal year 2004 will be used to continue the feasibility study, including economic and environmental analyses, plan selection, and coordination with local interests. The estimated cost of the feasibility phase is $2,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$2,525,000
Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	1,250,000
Feasibility Phase (Non-Federal)	1,250,000

The reconnaissance phase was completed in September 2002. The feasibility study completion is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Raritan Bay and Sandy Hook Bay, Highlands New York District	1,750,000	235,000	TBD	200,000	TBD

The study area is located along the Raritan Bay and Sandy Hook Bay in the Town of Highlands, New Jersey, in northeast Monmouth County, New Jersey, approximately 20 miles southwest of the Battery New York City. This low-lying suburban area is subject to tidal flooding from coastal storms and tidal surges that cause major damages to the Town's businesses, residences, and small marinas. The recession of the beachfront has eliminated any protection afforded to the area and is exposing existing coastal protection measures and drainage works to further damage. Tidal surges often block existing storm drainage systems, which compound flooding. The purpose of the feasibility study is to assess the need for hurricane and storm damage protection measures along the shoreline.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended separate interim feasibility study be conducted for the Highlands area. The reconnaissance phase, certified in February 2001, found there is a Federal interest for further studies for potential hurricane and storm damage protection measures. The feasibility phase will evaluate these measures, including floodwalls, tide gates, pump stations, and shoreline stabilization that are estimated to cost $45 million. A supplemental feasibility cost-sharing agreement was executed in October 2001 with the New Jersey Department of Environmental Protection.

Fiscal Year 2003 are being used to continue the feasibility phase of the study, including surveys, environmental scoping, data gathering and preliminary plan formulation. The funds requested for Fiscal Year 2004 will be used to continue the feasibility phase, including the plan formulation. The estimated cost of the feasibility phase is $3,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$3,500,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,750,000
Feasibility Phase (Non-Federal)	1,750,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost sharing agreement for Highlands was executed in October 2001. The interim feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Raritan Bay and Sandy Hook Bay, Keyport New York District	1,625,000	266,000	TBD	200,000	TBD

The study area is located in the Town of Keyport in northern Monmouth County, approximately 20 miles southwest of the Battery New York City. This low-lying suburban area is subject to tidal flooding from coastal storms and tidal surges that cause major damages to the Town's businesses, residences, and small marinas. The recession of the beachfront has eliminated any protection afforded to the area and is exposing existing coastal protection measures and drainage works to further damage. Tidal surges often block existing storm drainage systems, which compound flooding. The purpose of the feasibility study is to assess the need for hurricane and storm damage protection measures along the shoreline.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended that separate interim feasibility studies be conducted including the Keyport area. Potential solutions would include floodwalls, breakwaters, tide gates, pump stations, shore stabilization elements and appurtenant features estimated to cost $15 million. A supplemental feasibility cost-sharing agreement was executed in August 2001 with the New Jersey Department of Environmental Protection.

Fiscal Year 2003 are being used to continue the feasibility phase of the study, including surveys, environmental scoping, data gathering and preliminary plan formulation. The funds requested for Fiscal Year 2004 will be used to continue the feasibility phase, including the plan formulation. The estimated cost of the feasibility phase is $3,250,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$3,250,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	$1,625,000
Feasibility Phase (Non-Federal)	$1,625,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost sharing agreement for Keyport was executed in August 2001. The feasibility study schedule for Keyport is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Raritan Bay and Sandy Hook Bay, Leonardo New York District	1,375,000	915,000	TBD	150,000	TBD

The study area is located in Leonardo, Monmouth County, New Jersey, approximately 20 miles southwest of the Battery New York City. The Leonardo area is subject to tidal flooding from coastal storms and storm surges causing shoreline erosion and recession that affect the beach front. The downtown business and residential area, which surrounds a small harbor, is subject to significant main floor flooding from storm surges. In addition, these coastal storms and storm surges caused the recession of a short beach-front, which has eliminated any protection afforded to the area and is exposing existing coastal protection measures and drainage works to further damage. The purpose of the feasibility study is to assess the need for hurricane and storm damage protection measures along the shoreline.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended separate interim feasibility study be conducted for the Leonardo area. Potential hurricane and storm damage protection measures being investigated include levees, tide gates, dunes, and beach fill. A supplemental feasibility cost-sharing agreement for Leonardo was executed in April 1999 with the New Jersey Department of Environmental Protection.

Fiscal Year 2003 funds are being used to continue feasibility phase of the study, including the refinement of alternatives, benefit and cost analyses, environmental assessments, and local coordination. Fiscal Year 2004 funds will be used to continue the feasibility phase of the study, including plan selection, economic optimization, environmental impact assessments, and local coordination. The cost of the feasibility phase is $2,750,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$2,750,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,375,000
Feasibility Phase (Non-Federal)	1,375,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost-sharing agreement for Leonardo was executed in April 1999. The interim feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW YORK					
Jamaica Bay, Marine Park and Plumb Beach New York District	2,510,000	2,195,000	TBD	147,000	TBD

Jamaica Bay is located in the Boroughs of Queens and Brooklyn in New York City and is about 8 miles long and 4 miles wide, covers 26 square miles, and opens to the Atlantic Ocean via Rockaway Inlet. Marine Park and Plumb Beach are located on the north side of Rockaway Inlet.

The study area constitutes a vital link in this regions coastal ecology. Over 300 species of birds utilize the bay, which represents a primary junction along the Atlantic Flyway, a major migratory route for east coast waterfowl. Various parts of the bay have been declared critical or important habitat for Federally protected species including piping plovers, sea turtles, and short nose sturgeons. The bay also serves as a spawning and nursery habitat for many species of anadromous and estuarine fish, including the commercially and recreationally important striped bass and bluefish. Jamaica Bay has undergone habitat degradation related to past and present Federal dredging and filling activities. Impacts to Jamaica Bay include extensive wetland/aquatic habitat losses, shoreline and bathymetry alterations and water quality degradation from adverse hydrological changes. The combination of degraded flushing and hydrology, and loss of pristine habitat has resulted in a decline in habitat diversity within the region.

The reconnaissance study for the interim environmental initiatives was completed in January 1994. The feasibility study is evaluating ecosystem restoration measures for wetland restoration, fish and wildlife habitat restoration, as well as circulation and flushing pattern alterations, and bay recontouring. A feasibility cost-sharing agreement for the environmental restoration portion of the Jamaica Bay feasibility phase effort was executed with the New York City Department of Environmental Protection on February 16, 1996.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study, including final plan evaluation and selection, and resource agency coordination. The funds requested for Fiscal Year 2004 will be used to complete the feasibility report, including coordination of the draft and final environmental impact statement. The estimated cost of the feasibility phase is $4,020,000, which is cost-shared on a 50-50 percent basis by Federal and Non-Federal interests. A summary of study cost sharing is as follows:

Total estimated study cost	$4,520,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	2,010,000
Feasibility Phase (Non-Federal)	2,010,000

The reconnaissance phase for the interim environmental initiatives was completed in February 1996. The interim environmental initiatives feasibility study scheduled is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
North Shore of Long Island, Asharoken New York District	998,000	570,000	TBD	134,000	TBD

The study area, located in the Village of Asharoken some 40 miles east of New York City, is subject to tidal flooding from coastal storms. The Village, a portion of the Town of Huntington in Suffolk County, New York, is located on a narrow spit of land about 2.5 miles long with Long Island Sound to the north and Duck Island Harbor to the south. The feasibility study will assess potential hurricane and storm damage measures.

Residential and commercial properties experienced major damages from storms in 1962, 1992 and 1996. During the 1992 storm, over 3000 area residents were without access and emergency services due to the flooding of Asharoken Avenue, the only access route between the Village and the Long Island mainland. The reconnaissance report for the North Shore of Long Island, completed in September 1995, found that there is Federal interest to proceed to the feasibility phase and recommended further studies for a potential plan for beach fill and buried seawalls to protect the area and keep the access roadway free from flooding. The feasibility cost sharing agreement was executed March 21, 2001 with the New York State Department of Environmental Conservation.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study, including preliminary baseline surveys and data collection. The funds requested for fiscal year 2004 will be used to continue the feasibility study, including environmental analyses, data collection, and evaluation of alternative plans. The estimated cost of the feasibility phase is $1,996,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,996,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	998,000
Feasibility Phase (Non-Federal)	998,000

The reconnaissance phase was completed in March 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
North Shore of Long Island, Bayville New York District	1,850,000	952,000	TBD	170,000	TBD

The Village of Bayville study area is located in northeastern Nassau County on a narrow strip of land connecting the Center Island peninsula and Long Island. Bayville faces Long Island Sound to the north and Oyster Bay to the south. Several communities, especially the Village of Bayville, have incurred major losses due to coastal erosion and flooding.

Hurricanes, tropical storms, and northeasters frequently cause damages to the study area. In December 1992, a northeaster inundated hundreds of residential and business properties with damages estimated at $12,000,000. Approximately 300 families were evacuated, and sections of Bayville were impassable for days.

The reconnaissance report, certified in May 1997, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study is evaluating hurricane and storm damage reduction measures for the Bayville area, such as combined buried seawalls with setback flood walls and interior drainage works to reduce tidal inundation from Long Island Sound and Oyster Bay. The feasibility cost-sharing agreement was executed in March 2001 with the New York State Department of Environmental Conservation.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study, including preliminary baseline surveys and data collection. The funds requested for fiscal year 2004 will be used to continue the feasibility study, including environmental analyses, data collection, and evaluation of alternative plans. The estimated cost of the feasibility phase is $1,996,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$3,175,000
Reconnaissance Phase (Federal)	525,000
Feasibility Phase (Federal)	1,325,000
Feasibility Phase (Non-Federal)	1,325,000

The reconnaissance phase was completed in March 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
South Shore of Staten Island New York District	2,150,000	1,583,000	TBD	250,000	TBD

The study area is located along the south shore of Staten Island, extending approximately 13 miles along the Lower New York Bay and Raritan Bay from Fort Wadsworth to Tottenville. The area has a long history of storm damage. In December 1992 and the March 1993, northeastern storms caused evacuations in several communities, damage to 40 structures from flooding, and loss of 30 structures from erosion. The December 1992 storm damages were estimated at $5,000,000. The loss of beachfront now leaves the area increasingly vulnerable to severe damages, even from moderate storms.

The reconnaissance report, completed June 1995, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study is evaluating shoreline protection measures for potential plans consisting of beach fill for the community of Annadale and a beach fill plan with dunes, levees, floodwalls and pump stations for the area from Oakwood Beach and to Fort Wadsworth. The feasibility cost-sharing agreement was executed in May 1999 with the New York State Department of Environmental Conservation.

Fiscal Year 2003 funds will be used to continue the feasibility study, including selection of final plan alternatives, and continuation of the environmental impact statements, and local coordination. The funds requested for fiscal year 2004 will be used to continue the feasibility study, including completion of the environmental impact statements. The estimated cost of the feasibility phase is $3,300,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,800,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	1,650,000
Feasibility Phase (Non-Federal)	1,650,000

The reconnaissance phase was completed in May 1999. The feasibility study schedule is being determined.

Subtotal Shoreline Protection Studies - Continuing	23,445,000	6,965,000	TBD	1,651,000	TBD

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
2. SURVEYS - CONTINUING					
d. Special Studies: The amount of $3,376,000 is requested in fiscal year 2004 for 20 special studies.					
DELAWARE					
Christina River Watershed, DE, MD, & PA Philadelphia District	1,400,000	100,000	TBD	50,000	TBD

The Christina River watershed is located in New Castle County, Delaware; Chester, Delaware, and Lancaster Counties in Pennsylvania; and Cecil County, Maryland, draining an approximate area of 565 square miles. The Christina River Watershed has been heavily urbanized since the mid-nineteenth century and many wetland areas were filled and converted to industrial uses.

A State of Delaware report, completed in 1994, evaluated the ecosystems conditions of the Christina and Brandywine (a major sub-watershed) Rivers. The report recommended potential measures to restore and protect the Christina and Brandywine watershed ecosystems for improving water quality, restoring stream banks, providing public access to the streams and dedicated greenways corridors, acquiring critical lands, cleaning up the watershed, establishing an urban wildlife refuge, and rejuvenating the Wilmington, Delaware waterfront. The State of Delaware has pursued several initiatives, including restoring 283 acres of the Old Wilmington Marsh. In addition, the State of Delaware through local programs, such as the Northern Delaware Wetlands Restoration Program and the Phragmites Control Program, is restoring 10,000 acres of wetlands and improving some 25,000 acres of wetlands along the Christina and Delaware Rivers.

The reconnaissance study is assessing the Federal interest for ecosystem restoration and potential solutions as well as opportunities for fish and wildlife habitat restoration and flood damage reduction. Flooding from hurricanes and nor'easters continues to cause problems in damage centers along portions of the Christina River and its tributaries. Tropical Storm Agnes in 1972 and Hurricane Floyd in 1999 were 100-year events. The potential non-Federal sponsors are the Delaware Department of Natural Resources and Environmental Control and the Water Resources Agency for New Castle County, who understands the cost sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement schedule is being determined

If the Section 905(b) analysis is found to be in accord with policy, the fiscal year 2003 funds will be used to initiate the feasibility phase of the study, including data collection and coordination with local interest. The funds requested for fiscal year 2004 will be used to continue the feasibility study, including formulation of plan

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $

Christina River Watershed, DE, MD, & PA
Philadelphia District

alternatives, economic and environmental analyses, and flood plain management investigations. The preliminary estimated cost of the feasibility phase is $2,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$2,700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,300,000
Feasibility Phase (Non-Federal)	1,300,000

The reconnaissance phase scheduled is being determined. The feasibility study completion is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
MARYLAND					
Eastern Shore, Mid-Chesapeake Bay Island Baltimore District	3,714,000	215,000	TBD	351,000	TBD

The Eastern Shore study area includes seven major watersheds; Sassafras River, Chester River, Eastern Bay, Choptank River, Nanticoke River, Wicomico River, and Pocomoke River that empty into the Chesapeake Bay.

The reconnaissance report, certified in November 1999, found there is a Federal interest to proceed to feasibility phase studies in eight areas and recommended that potential plans be evaluated for: (1) wetland corridor creation, (2) wetland restoration in marginal agricultural areas, (3) wetland floodplain function restoration on naturally occurring watercourses, (4) anadromous fish passage, (5) treatment of contaminated and nutrient-laden groundwater, (6) beneficial use of dredged material, (7) land acquisition, and (8) master plan for restoration, creation, and protection of the natural infrastructure.

The State of Maryland changed its first priority for a feasibility phase study from the James Island in Dorchester County, Maryland, to the Mid Chesapeake Bay Island area. This feasibility study is evaluating restoring hundreds of acres of wetlands and fish and wildlife habitat in the Mid Chesapeake Bay Island area through the beneficial use of dredged material. The feasibility cost-sharing agreement for the Mid-Chesapeake Bay Island area study was executed in November 2002 with the Maryland Department of Transportation (Maryland Port Administration). Additional feasibility cost-sharing agreements will be executed when the State of Maryland sets it study prioritization and funding becomes available.

FY 2003 funds are being used to continue into the feasibility phase of the study, including plan formulation, environmental impact analyses, and public involvement. The funds requested for FY 2004 will be used to continue the feasibility phase of the study, including formulation of alternatives plans, environmental impact analyses, and public involvement. The estimated cost of the feasibility phase is $6,997,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$7,212,000
Reconnaissance Phase (Federal)	215,000
Feasibility Phase (Federal)	3,499,000
Feasibility Phase (non-Federal)	3,498,000

The reconnaissance phase for the Mid-Chesapeake Bay Island study was completed in November 2002. The Mid-Chesapeake Bay Island feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Lower Potomac Estuary Watershed, St. Mary's Watershed Baltimore District	680,000	318,000	TBD	200,000	TBD

The Lower Potomac Estuary is 150 miles in length, has a drainage area of about 1,850 square miles and empties into the Chesapeake Bay. There are several navigation projects on the lower Potomac River. Increasing population and development growth is degrading the lower Potomac River watershed's environment in Maryland and Virginia. In addition, the construction of the Federal navigation projects contributed to the degradation and loss of the region's fish and wildlife habitats. The reconnaissance study focused on navigation, fish and wildlife restoration and creation, flood damage reduction and improvement of recreational opportunities. Completed in July 1997, the reconnaissance study recommended conducting feasibility studies in several watersheds throughout the study area to evaluate potential environmental restoration projects.

St. Mary's watershed, Maryland, is the second feasibility study to be conducted from the Lower Potomac Estuary Watershed reconnaissance effort. The feasibility study is evaluating environmental restoration needs and opportunities that Federal, State and local entities can use to plan potential projects to protect or minimize degradation to existing fish and wildlife habitats. The non-Federal sponsor is St. Mary's County. The feasibility cost sharing agreement was executed in November 2000.

Fiscal Year 2003 funds are being used to continue the feasibility study, including concept and detailed designs, environmental impact analyses and public involvement. The funds requested for fiscal year 2004 will be used to continue the feasibility phase, including plan formulation and preparation of the draft feasibility report. The estimated cost of the feasibility phase is $1,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$1,280,000
Reconnaissance Phase (Federal)	80,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (Non-Federal)	600,000

The reconnaissance phase for the St. Mary's watershed, Maryland area was completed in November 2000. The St. Mary's watershed, Maryland, feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Middle Potomac River Watershed, MD, VA, PA, WV, & DC Baltimore District	2,500,000	150,000	TBD	100,000	TBD

The study area encompasses 175 miles of the Potomac River from the confluence of the North and South Branches of the Potomac River in Allegany County, Maryland, through the District of Columbia to Mt. Vernon, Virginia. The Middle Potomac River Watershed area includes five counties in Maryland, two counties in Virginia, three counties in Pennsylvania, four counties in West Virginia, and the District of Columbia.

The reconnaissance study is assessing if there is a Federal interest for further feasibility studies to undertake a comprehensive water resources study of the Middle Potomac River including evaluation of degradation and loss of wetlands and fish and wildlife habitat, periodic flooding, streambank erosion, and water supply and recreational management problems. Potential solutions include wetland restoration or creation, retention structures, improvement or replacement of water supply systems, riparian corridor restorations, and fish and wildlife habitat restoration including water quality improvements. The potential non-Federal sponsor(s) for the feasibility phase of the study are the States of Maryland and West Virginia, Commonwealths of Pennsylvania and Virginia, Washington, D.C., and the Interstate Commission on the Potomac River Basin, who understand the cost-sharing requirements for the feasibility study that may follow the reconnaissance study. The feasibility study cost sharing agreement schedule is being determined.

Fiscal Year 2003 funds are being used to continue the Section 905(b) analysis, coordinate with the non-Federal sponsors and negotiate and execute the feasibility study cost sharing agreement. If the Section 905(b) analysis is certified to be in accord with policy, the funds requested for fiscal year 2004 will be used to continue into the feasibility phase of the study, including data gathering, economic and environmental analyses, and public coordination. The preliminary estimated cost of the feasibility phase is $4,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$4,500,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
MASSACHUSETTS					
Blackstone River Watershed Restoration, MA and RI New England District	1,447,000	1,050,000	TBD	50,000	TBD

The study area includes the entire Blackstone River Watershed, which originates in Worcester, Massachusetts and flows southward to the National Estuary of Narragansett Bay in Pawtucket, Rhode Island. The watershed is approximately 540 square miles and encompasses 30 cities and towns in south central Massachusetts and northern Rhode Island. There is one Federal flood control reservoir and four local protection projects within this relatively small watershed to alleviate flooding in urban areas and protect major utilities and roadways. These projects consist of over 9 miles of channel improvements, dikes, floodwalls, tunnels and conduits that have decreased the value and diversity of fish habitat in the project areas and have altered the natural hydrologic regime of the watershed. The Blackstone River is also the largest single source of pollutants such as suspended solids, PCB's, metals and organics discharging into Narragansett Bay. One source of this pollution is the resuspension of contaminated sediments, which have collected behind existing impoundments along the river. The study will evaluate possible measures to correct the numerous problems of the Blackstone River Watershed and improve its overall resource value. A feasibility cost-sharing agreement was executed on May 24, 1999 with the Massachusetts Executive Office of Environmental Affairs. By letter dated May 31, 2001, the Rhode Island Department of Environmental Management declined to participate in the feasibility study due to funding constraints to provide its matching cost-share at this time.

Fiscal Year 2003 funds are being used to continue the feasibility phase, including cost estimating and plan evaluation. Funds requested for Fiscal Year 2004 will be used to continue the feasibility phase, including preparation of the draft report. The estimated cost of the feasibility phase is $2,040,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$2,467,000
Reconnaissance Phase (Federal)	427,000
Feasibility Phase (Federal)	1,020,000
Feasibility Phase (Non-Federal)	1,020,000

The reconnaissance phase was completed in May 1999. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Coastal Massachusetts Ecosystem Restoration, Massachusetts and Cape Cod Bays New England District	625,000	125,000	TBD	170,000	TBD

The study area encompasses the Massachusetts and Cape Cod Bays (MCCB) coastal shoreline and associated waters within the Commonwealth of Massachusetts, including the EPA designated national estuary of MCCB. The biologically diverse ecosystem created by the many natural salt marshes along the Massachusetts coast has historically provided exceptionally productive fish and wildlife habitat. Salt marshes provide significant economic and environmental benefits for the region by providing flood storage, filtering pollutants, and supporting commercial fisheries as well as recreational fishing and tourism. Over the past century, many of these natural salt marshes have been lost or degraded by the construction of transportation facilities and other coastal development. There are 25 navigation and 11 beach erosion control projects in this region of Massachusetts. Several of these projects involved the disposal of dredged material in coastal wetlands or salt marshes such as the Green Harbor project. Dredged material was disposed of in Town Marsh filling approximately 35 acres of productive salt marsh above mean high tide, resulting in a relatively unproductive upland habitat. Studies will evaluate this and other sites to determine measures to restore the ecological productivity of the MCCB coastline. This study is consistent with the objectives of Coastal America to restore all degraded salt marshes in the Commonwealth and is supported by the Executive Office of Environmental Affairs (EOEA), Department of Transportation and numerous Federal agencies, as evidenced by their signing an MOU to restore Massachusetts wetlands. A feasibility cost-sharing agreement was executed on October 15, 2002 with the Mystic Valley Development Commission.

The reconnaissance report, certified in August 2001, recommended feasibility phase studies to identify potential solutions to restore lost or degraded salt marshes by restoring the natural tidal exchange and ecological productivity of these areas. Fiscal Year 2003 funds are being used to initiate a feasibility study for environmental restoration measures along the Malden River in the communities of Malden, Medford and Everett. Study efforts will include data collection, initial public involvement and identification of areas of lost or degraded salt marsh. Funds requested for Fiscal Year 2004 will be used to continue the feasibility phase, including plan formulation of restoration plans and environmental analysis. The estimated cost of the feasibility phase is $1,000,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,125,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Non-Federal)	500,000

The reconnaissance phase was completed in October 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW HAMPSHIRE					
Connecticut River Ecosystem Restoration, NH & VT New England District	850,000	100,000	TBD	115,000	TBD

The Connecticut River Watershed extends from the northernmost part of New Hampshire to Long Island Sound and includes a small portion of the Canadian Providence of Quebec. The total drainage area of the Connecticut River is 11,260 square miles of which 3,046 square miles lie in New Hampshire and 3,928 square miles in Vermont. The Connecticut River Watershed has experienced considerable development resulting in significant loss of floodplain, fish spawning habitat (e.g. Atlantic salmon, striped Bass), wetlands, waterfowl nesting areas and other valuable fish and aquatic habitat. Existing aquatic habitat resources have also been impacted by deposition of eroded streambank material. In addition, the construction of dams on the river has altered the watershed's natural hydrologic regime and has blocked the passage of anadromous fish. Studies are needed to identify and evaluate measures to reduce streambank erosion, restore anadromous fisheries migratory corridors and spawning habitat, restore degraded wetlands and riverine habitat and improve the overall fish and wildlife habitat of the Connecticut River. The potential non-Federal sponsors for the study are the New Hampshire Department of Environmental Services and Vermont Agency of Natural Resources. They are aware of the cost sharing requirements for the feasibility study. The feasibility cost sharing agreement schedule is being determined.

If the reconnaissance study is certified to be in accord with policy, Fiscal Year 2003 funds will be used to initiate the feasibility phase of the study, including initial data collection and plan formulation. Funds requested for Fiscal Year 2004 will be used to continue the feasibility phase, including plan formulation of restoration plans and environmental analysis. The estimated cost of the feasibility phase is $1,500,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW JERSEY					
Hudson-Raritan Estuary, Hackensack Meadowlands New York District	2,600,000	0	TBD	100,000	TBD

The study area encompasses a 20-acre tidal estuary located in the lower Hackensack River Basin located within portions Bergen, Essex, and Hudson Counties in New Jersey. The area, about five miles west of Manhattan Island, is urban to suburban and has been heavily industrialized since the mid-nineteenth century. Over the pass one hundred year, deforesting of the cedar stands, channel modifications, levee construction, and damming of the Hackensack River and its tributaries for irrigation and water supply purposes, has changed the estuary. Furthermore, the industrial activities, effluents discharges from local sources and highway stormwater systems, and leachates from former garbage dumps within the estuary, has contaminated the river bottom sediments and degraded the wetlands producing an unfavorable environment for fish and wildlife.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies for the Hackensack Meadowlands. The interim feasibility study for the Hackensack Meadowlands will assess items that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality with in the Hackensack Meadowlands. The non-Federal sponsor is the New Jersey Meadowlands Commission, who fully understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement schedule is being determined.

Fiscal year 2003 funds are being used to initiate the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. Funds requested for fiscal year 2004 will be used to continue the feasibility study by identifying the recommended plans and preparing the environmental assessments. The preliminary estimated cost of the feasibility study is $5,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$5,200,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	2,600,000
Feasibility phase (Non-Federal)	2,600,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Hudson-Raritan Estuary, Lower Passaic River New York District	5,000,000	67,000	TBD	25,000	TBD

The study area is located in Essex County, New Jersey, about five west of the Battery New York City and encompasses the lower Passaic River Basin from the river's confluence with Newark Bay to Dundee Dam. The area is urban to suburban and has been heavily industrialized since the mid-nineteenth century. This industrial activity has resulted in the degradation of the wetlands; discharges of effluents into the river, and dumping of refuse resulting in contaminated sediments in the river that is unfavorable for fish and wildlife habitat.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies in the lower Passaic River Basin. The interim feasibility study for the Lower Passaic River will assess items that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality in the Lower Passaic River and sections of Newark bay. The non-Federal sponsor is the New Jersey Department of Transportation, Office of Maritime Resources, who fully understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement schedule is being determined.

Fiscal Year 2003 will be used to initiate the feasibility study, including data collection and local coordination. Funds requested for Fiscal Year 2004 will be used to continue the feasibility study, including economic, hydraulic and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. The preliminary estimated cost of the feasibility study is $10,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$10,000,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	5,000,000
Feasibility phase (Non-Federal)	5,000,000

The reconnaissance phase schedule for the Lower Passaic area is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Lower Passaic River New York District	2,600,000	252,000	TBD	25,000	TBD

The Passaic River Basin is a 935 square miles basin located in north-central New Jersey and southeastern New York about 15 miles northwest of the Battery New York City. The ecosystem in the Passaic River basin, particularly the lower portion of the basin, has been subjected to degradation from industrial and commercial activities since the mid-nineteenth century, as well as from urban development. Local communities desire to restore portions of the Passaic River basin to its natural state.

A reconnaissance report, approved October 2001, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility phase will assess ecosystem restoration opportunities and potential solutions within the Passaic River Basin. Such ecosystem restoration measures include restoring or recreating wetlands, fish spawning habitat, and waterfowl nesting areas. In addition, the reconnaissance study evaluated restoring the natural river channel in areas that have been altered by flood control structures. The potential non-Federal sponsor is the New Jersey District Water Supply Commission, who understands the cost sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement schedule is being determined.

Fiscal Year 2003 funds are being used to initiate the feasibility phase of the study, including data collection and coordination with local interests. Funds requested for fiscal year 2004 will be used to continue the feasibility study, including data collection, economic, environmental analyses necessary to establish baseline conditions, and plan formulation. The preliminary estimated cost of the feasibility phase is $5,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$5,100,000
Reconnaissance phase (Federal)	100,000
Feasibility phase (Federal)	2,500,000
Feasibility phase (Non-Federal)	2,500,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Stony Brook - Millstone River Basin New York District	3,500,000	332,000	TBD	200,000	TBD

The study area is located in central New Jersey in Mercer, Middlesex, Monmouth, Hunterdon, and Somerset Counties and includes the Stony Brook, Peters Brook, Woodsville Brook, Baldwin Brook, Lewis Brook, and Honey Branch, all tributaries to the Millstone River. Stony Brook is the largest tributary to the Millstone River, draining an approximate 56 square miles area. This area is suburban in nature and the population is expected to grow by 30 percent by the year 2010.

Storm events cause frequent flooding in communities along Stony Brook and the other tributaries to the Millstone River. Hurricane Floyd in September 1999 and Hurricane Doria in August 1971 caused two of the largest floods of record in the area. Hurricane Floyd was a 500-year flood event inundating the area with 10-12 inches of rain in a 24-hour period and causing 4 deaths in New Jersey. A major damage center is the Borough of Manville, New Jersey, located downstream from the confluence of Stony Brook and most of the tributaries to the Millstone River. Manville experiences fluvial flooding from the Millstone River in addition to backwater flooding from the Raritan River. Eight major flood events have affected Manville since 1921 with Hurricane Floyd causing damages in the hundreds-of-millions dollars range.

The reconnaissance study, completed in September 2000, found there is Federal interest to proceed to the feasibility phase of the study and recommended further studies for potential levees and floodwalls along the Millstone River in the Manville area. Ecosystem restoration for lake, streambank, and wetlands restoration were recommended along the Stony Brook, Millstone River, and Rocky Brook. The feasibility cost-sharing agreement was executed in March 2002 with the New Jersey State Department of Environmental Protection.

Fiscal Year 2003 funds will be used to continue the feasibility phase of the study, including data collection and baseline surveys. The funds requested for fiscal year 2004 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions. The estimated cost of the feasibility phase is $6,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$6,900,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	3,400,000
Feasibility Phase (Non-Federal)	3,400,000

The reconnaissance phase was completed in March 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW YORK					
Hudson-Raritan Estuary, NY & NJ New York District	9,740,000	1,588,000	TBD	685,000	TBD

The study area includes the Port of New York and -New Jersey and includes the Ambrose and Anchorage Channel; New York and New Jersey Channels; Newark Bay Channel; Port Jersey Channel; Claremont Channel; Bay Ridge and Red Hook Channel; and Buttermilk Channel, the Upper and Lower New York Bays, the Raritan Bay and Jamaica Bay. The Port of New York-New Jersey is the largest port on the East coast with channels ranging depths of 35 to 45 feet. These waters and the surrounding shoreline, mudflats, intertidal marshes, and adjacent upland areas provide valuable habitat for fish, plant and wildlife resources, and accommodate migrating birds along the Atlantic flyway. The area is also utilized by a number of Federally threatened/endangered species including the shortnosed sturgeon, five species of sea turtles, peregrin falcons, piping plovers and rosette terns.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies. The feasibility study is assessing thirteen specifics sites within the estuary for potential ecosystem restoration measures, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality. The feasibility cost-sharing agreement was executed in July 2001 with the Port Authority of New York and New Jersey.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study, including data collection, preliminary plan formulation for a comprehensive estuary restoration improvement plan and coordination with local interest. The funds requested for fiscal year 2004 will be used to continue the feasibility phase, including data collection, economic, hydraulic, and environmental analyses necessary to formulate alternatives for a comprehensive restoration improvement plan and site-specific restoration opportunities. The estimated cost of the feasibility study is $19,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	19,240,000
Reconnaissance Phase (Federal)	240,000
Feasibility Phase (Federal)	9,500,000
Feasibility Phase (Non-Federal)	9,500,000

The reconnaissance phase is scheduled for completion in July 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Hudson-Raritan Estuary, Gowanus Canal New York District	2,500,000	293,000	TBD	255,000	TBD

The Gowanus Canal is located in Brooklyn, New York, approximately four miles southeast of the Battery New York City. The canal is non-Federal and extends from the Hamilton Avenue Bridge at the end of a Federal navigation project northeasterly into Brooklyn for approximately two miles. The Canal was constructed about 1881 to accommodate industrial users and commercial shippers from the Brooklyn waterfront. The area around the canal has been heavily industrialized and urbanized since the mid-nineteenth century.

The Gowanus Creek Channel Federal navigation project, constructed between 1881 and 1952, is a 30-foot deep channel, with a tapering width of 500-to-200 feet from Gowanus Bay to the vicinity of Sigourney Street, then an 18-foot deep channel, with a tapering width from 200-to-100 feet to the Hamilton Avenue Bridge for an approximate length of 4000 feet. In addition, there is a 30-foot deep, 150-foot wide branch channel from Gowanus Bay extending northerly to the Henry Street basin. The industrial users of the Canal throughout the nineteenth and twentieth centuries have caused significant environmental degradation to Gowanus Creek and Gowanus Canal by allowing hazardous materials to be deposited at the bottom of these channels. In addition, the pollution poses a great risk to area residents, and fish and wildlife.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies for the Gowanus Canal. The feasibility study for Gowanus Canal will assess opportunities that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality. The feasibility cost-sharing agreement was executed in January 2002 with the New York City Department of Department of Environmental Protection.

Fiscal year 2003 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. Funds requested for fiscal year 2004 will be used to continue the feasibility study, including plan formulation and selection, and preparation of the environmental documentation. The estimated cost of the feasibility study is $5,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$5,000,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	2,500,000
Feasibility phase (Non-Federal)	2,500,000

The reconnaissance phase was completed in January 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Saw Mill River Basin New York District	1,600,000	181,000	TBD	50,000	TBD

The Saw Mill River Basin is located in the southwestern part of Westchester County, New York. The drainage area of the basin is approximately 26.5 square miles. The Saw Mill River begins in the town of New Castle and flows in a southwesterly direction passing through the City of Yonkers to the Hudson River.

Federal flood control projects have been completed along several sections of the Saw Mill River at Chappaqua, Ardsley, Nepera Park, and Yonkers, New York. Construction of the flood control projects has removed the natural material in the channel bed with varying riffles and pools and replaced it with a relatively uniform bottom lined with rock and concrete mat. This has changed the aquatic resources and habitat ecology. Erosion of the channel banks has resulted and many trees immediately along the improved channel were removed along with herbaceous vegetation. Additional vegetation would result in significant habitat improvement.

The reconnaissance report, certified in February 2000, found there is a Federal interest for ecosystem restoration throughout the basin. The feasibility study will consider measures to reestablish and creation of wetlands and aquatic habitat, removal of barriers to fish migration, and streambank erosion control. The potential sponsor for the feasibility phase of the study is the Westchester County, who fully understands the cost sharing requirements. The feasibility cost sharing agreement schedule is being determined.

The Fiscal Year 2003 funds will be used to initiate the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions. The funds requested for fiscal Year 2004 will be used to continue the feasibility phase of the study, including formulation of plan alternatives. The preliminary estimated cost of the feasibility study is $3,000,000 to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Upper Delaware River Watershed Philadelphia District	1,325,000	125,000	TBD	50,000	TBD

The study area is located in southeastern New York, about 45 miles southwest of Albany, New York, and encompasses the upper main stem of the Delaware River and four major tributaries: the East and West Branches of the Delaware River, the Neversink River, and the Mongaup River. These rivers drain some 2,360 square miles. A Federal flood control project, consisting of an earthen levee and ponding area, was completed in 1972 in the Village of East Branch, New York. The ecosystem is degrading due to increased water turbidity, streambank erosion, channel migration, and flooding from storm events. The Upper Delaware River watershed area is the main source of potable water for 9 million people who live in the Greater New York City area, providing 700 million gallons of water per day from three reservoirs. The watershed is also known for its world famous trout fisheries. In addition, major storms in January 1996, November 1996, June 1998, and July 1998 caused major flooding with extensive damage to roads, the local infrastructure, residential and commercial properties in Delaware and Sullivan Counties, including the communities of Stamford, Delhi, and Middletown.

The reconnaissance report, certified in July 1997, found there is a federal interest for further feasibility phase studies. The feasibility study will evaluate potential solutions for ecosystem restoration; flood damage reduction and protection measures, including structural and non-structural measures; flood plain management measures; as well as opportunities for streambank erosion control, water quality and flow management, stream corridor management, and geographic information modeling. The potential sponsor for the feasibility phase of the study is the New York State Department of Environmental Conservation, who understands the financial requirements for the feasibility phase of the study. The feasibility cost-sharing agreement schedule is being determined.

Fiscal Year 2003 funds are being used to initiate the feasibility study upon execution of the cost-sharing agreement. The funds requested for fiscal year 2004 will be used to continue the feasibility study, including data collection, formulation of plan alternatives, and coordination with local interests. The preliminary estimated cost of the feasibility phase is $2,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$2,525,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	1,200,000
Feasibility Phase (Non-Federal)	1,200,000

The reconnaissance phase schedule is being determined. The feasibility study completion is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Upper Susquehanna River Basin, Cooperstown Baltimore District	1,330,000	858,000	TBD	200,000	TBD

The Upper Susquehanna River Basin, upstream of the mainstem's confluence with the Chemung River, is 120 miles in length, has a drainage area of 3,890 square miles, and includes the State of New York and the Commonwealth of Pennsylvania. The Upper Susquehanna River Basin area in Cooperstown, New York, has experienced environmental degradation from past and present land use practices, flooding, streambank erosion, sedimentation, and loss of wetland habitats, water quality degradation, and landscape fragmentation.

The reconnaissance study for the Upper Susquehanna River Basin, certified in June 2001, found there is a Federal interest for further feasibility phase studies. The first feasibility study is focusing on the Cooperstown, New York area and is evaluating ecosystem restoration measures for wetlands and fish and wildlife habitats restoration, as well as sediment and nutrient reduction measures. The feasibility cost-sharing agreement for the Cooperstown, New York interim study was executed in January 2002 with the New York State Department of Environmental Conservation.

Fiscal Year 2003 funds are being used to continue plan formulation for the remaining restoration sites, and local coordination. The funds requested for fiscal year 2004 will be used to prepare the draft feasibility report. The estimated cost of the feasibility phase is $1,640,000, which is to be cost-shared on a 75-25 percent basis by Federal and non-Federal interests in accordance with Section 567 of the Water Resources Development Act of 1996. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	$1,740,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,230,000
Feasibility Phase (Non-Federal)	410,000

The reconnaissance phase for the Cooperstown, New York, area was completed in January 2002. The Cooperstown, New York, feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Upper Susquehanna River Basin, Phase II, NY & PA Baltimore District	4,900,000	25,000	TBD	180,000	TBD

The Upper Susquehanna River Basin, upstream of the mainstem's confluence with the Chemung River, is 120 miles in length, has a drainage area of 3,890 square miles, and includes the State of New York and the Commonwealth of Pennsylvania. The Upper Susquehanna River Basin has experienced environmental degradation from past and present land use practices, flooding, streambank erosion, sedimentation, and loss of wetland habitats, water quality degradation, and landscape fragmentation.

The reconnaissance study, certified in June 2001, found there is a Federal interest for further feasibility studies in the State of New York and the Commonwealth of Pennsylvania. The non-Federal sponsor for New York, the New York State Department of Environmental Conservation, indicated in a letter dated May 3, 2002, that it is willing to negotiate a second feasibility cost-sharing agreement for a feasibility study in the Catatonk Creek, Trout Brook, Castle Creek, Upper Chenango River, Otsego Lake, Upper Unadilla River, and Cherry Valley Creek sub-watersheds. This feasibility study will evaluate ecosystem restoration measures for wetland restoration, sediment and nutrient reduction for existing wetlands, fish and wildlife habitat restoration, and groundwater recharge within the sub-watershed areas. The New York State Department of Environmental Conservation fully understands the cost-sharing requirements for this feasibility study. The feasibility cost-sharing agreement schedule is being determined. Additional feasibility studies will be negotiated with the Commonwealth of Pennsylvania upon prioritization by Pennsylvania and the availability of funding.

Fiscal Year 2003 funds are being used to prepare the project management plan and negotiate and execute the feasibility study cost-sharing agreement for the Phase II sites in New York State. The funds requested for fiscal year 2004 will be used to initiate data collection and plan formulation for the Phase II sites. The preliminary estimated cost of the feasibility phase is $6,400,000, which is to be cost-shared on a 75-25 percent basis by Federal and non-Federal interests in accordance with Section 567 of the Water Resources Development Act of 1996. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	$6,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	4,800,000
Feasibility Phase (Non-Federal)	1,600,000

The reconnaissance phase for the Phase II study schedule is being determined. The Phase II feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
PENNSYLVANIA					
Schuylkill River Basin, Wissahickon Philadelphia District	750,000	75,000	TBD	50,000	TBD

This study area is located in southeastern Pennsylvania, along the Wissahickon Creek, a tributary to the Schuylkill River. The 25-mile long creek is about 13 miles upstream of the confluence with the Delaware River in Philadelphia, Pennsylvania, draining an approximate area of 64 square miles. High water flows during storm events are degraded the ecosystem and water quality within the creek due to sedimentation from streambank erosion, as well as causing flood damages in the communities of Whitpain, Lower Gwynedd, Whitemarsh, Springfield, Ambler, West Ambler, Lansdale, Ft. Washington and Abington, Pennsylvania. Major floods occurred in 1973, 1975, 1976, 1978, 1979, and 1982. The most recent storm event, in September 1996, caused damages estimated at $3.5 million and damaged 500 residences.

A Limited Reconnaissance Study of the Schuylkill River basin, completed in 1990, recommended further studies for flood damage reduction and protection measures within the Schuylkill River basin, including Wissahickon Creek.

This feasibility study will evaluate potential solutions for ecosystem restoration, flood plain management measures, streambank erosion control, water quality management, stream flow and corridor management, and geographic information system modeling, as well as opportunities for local flood damage reduction and protection measures in the City of Philadelphia and local communities within Philadelphia and Montgomery Counties, Pennsylvania. The potential sponsors for the feasibility cost-sharing agreement are the City of Philadelphia, Philadelphia and Montgomery counties and the Pennsylvania Department of Environmental Protection, who fully understand the financial requirements for the feasibility phase of the study. The feasibility cost-sharing agreement schedule is being determined

Fiscal Year 2003 funds are being used to complete the reconnaissance phase at full federal expense. If the Section 905 (b) analysis is found to be in accord with policy, the remaining fiscal year 2003 funds will be used to initiate feasibility phase of the study, including data collection and coordination with local interests. The funds requested for fiscal year 2004 will be used to continue the feasibility phase, including data collection, environmental, economic and engineering analyses, formulation of plan alternatives, and coordination with local interests. The preliminary estimated cost of the feasibility phase is $1,300,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,400,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	650,000
Feasibility Phase (Non-Federal)	650,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
RHODE ISLAND					
Rhode Island Ecosystem Restoration New England District	1,200,000	311,000	TBD	20,000	TBD

The study area encompasses all coastal and riverine areas within the Pawcatuck, Pawtuxet, Moshassuck, Ten Mile and Woonasquatucket River Watersheds; and along the western shoreline of Narragansett Bay in Rhode Island. The biologically diverse ecosystems created by the many natural salt marshes and wetlands in the study area have historically provided exceptionally productive fish and wildlife habitat. Salt marshes and wetlands provide significant economic and environmental benefits for the region by providing flood storage, filtering pollutants, supporting commercial fisheries, recreational fishing and tourism. Over the past century, many of these natural salt marshes, eel grass beds and wetlands have been lost or degraded by development activities in the coastal and riverine floodplains and from the disposal of dredged material. Development of coastal and riverine floodplains, along with the construction of dams, has also impacted historic anadromous fish populations. Studies will evaluate these and other sites to determine measures to restore the ecological productivity of the coastline and riverine areas. These studies will identify and prioritize numerous opportunities to restore degraded coastal and freshwater wetlands impacted by filling, riverine migratory corridors and submerged aquatic vegetation.

Due to limited funding, the State of Rhode Island has requested that several separate feasibility efforts be conducted. The first interim feasibility cost-sharing agreement was executed on March 15, 2001 with the Rhode Island Department of Environmental Management. This interim feasibility study is assessing measures to restore anadromous fish passage at three dams along the Ten Mile River. These dams are Omega Dam at Tidewater, Hunts Mill Dam, and the dam at Turner Reservoir.

A second interim feasibility study will evaluate measures to restore a 12-acre salt marsh located along Narragansett Bay at the Inlet of Calf Pasture. The channel leading to Calf Pasture Marsh from the beach is not well defined and does not allow flushing except during spring or other high tide events. There are also numerous stagnant pools within the salt marsh, which are formed by interior dikes and contribute to mosquito problems. This interim study will evaluate measures to restore the ecological productivity of this coastal salt marsh. The second interim feasibility cost-sharing agreement schedule is being determined. The Rhode Island Department of Environmental Management is assessing two other potential sites to conduct interim feasibility studies at this time.

Fiscal Year 2003 funds are being used to complete the Ten Mile River feasibility study and initiate the Inlet of Calf Pasture feasibility study, including plan formulation to restore the tidal wetland and improve tidal flow and salinity. The funds requested for Fiscal Year 2004 will be used to continue the Inlet of Calf

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $

Rhode Island Ecosystem Restoration
New England District

Pasture feasibility study. The estimated cost of the feasibility phase is $2,000,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$2,200,000
Reconnaissance Phase (Federal)	200,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase was completed in March 2001. The Ten Mile River interim feasibility cost-sharing agreement schedule is being determined. The Inlet of Calf Pasture interim feasibility study schedule, as well as the overall feasibility study schedule, is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
VIRGINIA					
Elizabeth River Basin, Environmental Restoration, Hampton Roads, Scott's Creek Norfolk District	650,000	0	0	200,000	TBD

The study area for this second feasibility study effort will encompasses Scott's Creek in Portsmouth, Virginia. The bottom sediments and the surrounding wetlands of Scott's Creek in Portsmouth, Virginia have been contaminated for over two hundred years by industry and commerce making this tributary to the Elizabeth River one of the nation's most contaminated waterways. This sub-estuary of the Chesapeake Bay once supported wildlife spawning grounds for rare terns, peregrine falcons, and great egrets, as well as mud flats for shellfish.

The reconnaissance report for the Elizabeth River Basin, certified in November 1997, found there was a federal interest to pursue further feasibility studies for sediment restoration measures at four sites: Scuffletown Creek, Scott's Creek, the former Eppinger and Russell wood treatment facility site, and the Compostella Bridge site, as well as wetland ecosystem restoration measures at 19 sites. The first feasibility study for Scuffletown Creek, completed in July 2001, recommended a sediment restoration project to remove/clean-up 60,000 cubic yards of bottom sediments, as well as construction of eight Section 206 Continuing Authorities ecosystem restoration projects to restore 22 acres of wetlands located in the Elizabeth River Basin.

This second feasibility study will evaluate sediment restoration measures to remove/clean-up bottom sediments in the Scott's Creek, Portsmouth, Virginia area, as well as opportunities for additional wetland restoration measures at some of the remaining 11 sites within the Elizabeth River Basin. The potential sponsors for the second feasibility study are the Commonwealth of Virginia and the City of Portsmouth, Virginia, who understand the cost-sharing requirements for the feasibility phase of the study. The supplemental feasibility cost-sharing agreement schedule is being determined.

The funds requested for Fiscal Year 2004 will be used to negotiate and execute a feasibility cost-sharing agreement for the Scott's Creek feasibility study, prepare a project management plan, and initiate the Scott's Creek feasibility study, including data collection and local coordination. The preliminary estimated cost of feasibility phase is $1,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,250,000
Supplemental FCSA (Federal)	50,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (non-Federal)	600,000

The supplemental feasibility cost-sharing agreement schedule for the Scott's Creek study is being determined. The Scott's Creek feasibility study schedule is also being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Lynnhaven River Basin Norfolk District	3,100,000	100,000	TBD	300,000	TBD

The Lynnhaven River Basin is located in Virginia Beach, Virginia, on the south shore of the Chesapeake Bay. The river drains an approximate 50 square miles watershed in southeastern Virginia and flows northerly emptying into the Chesapeake Bay about 10 miles east of Norfolk, Virginia. A Federal navigation project is maintained within the upper reaches of the river. The project depth varies from 10 feet deep at the river's entrance with Chesapeake Bay, to a 6 feet deep channel at the narrows between Broad Bay and Linkhorn Bay. In addition, the river basin was once a highly productive ecosystem, producing the world famous Lynnhaven oyster. However, residential and commercial development, and the loss of wetlands and forested buffers have increased sedimentation, which degraded the ecosystem and water quality, causing the oyster population to decline to essentially no marketable production today. In addition, only 900 acres of wetlands exist today, which is less than half of the acreage present 30 years ago.

A reconnaissance study, completed in July 2002, found there is a Federal interest for further feasibility phase studies for six areas within the Lynnhaven River Basin. The feasibility study will evaluate ecosystem restoration measures to improve water quality, restore wetlands, sub-aqueous vegetation, and fish and wildlife habitats, and improve the river bottom material by dredging or other decontamination methods. The potential sponsor the feasibility phase of the study is the City of Virginia Beach, Virginia, who understands the cost-sharing requirements to the feasibility phase of the study. The feasibility cost-sharing agreement schedule is being determined.

If the Section 905(b) analysis is certified to be in accord with policy, the fiscal year 2003 funds will be used to initiate the feasibility phase of the study, including data collection and local coordination. The funds requested in fiscal year 2004 funds will be used to continue the feasibility phase of the study, including economic and environmental analyses, preliminary plan formulation, and local coordination. The preliminary estimated cost of feasibility phase is $6,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$6,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	3,000,000
Feasibility Phase (non-Federal)	3,000,000

The reconnaissance phase schedule is being determined. The feasibility study schedule is being determined.

Subtotal Special Studies - Continuing	52,011,000	6,290,000	TBD	3,376,000	TBD

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
2. SURVEYS – CONTINUING					
e. Comprehensive Studies: The amount of $450,000 is requested in fiscal year 2004 for two comprehensive studies.					
NEW HAMPSHIRE					
Merrimack River Watershed Study, NH & MA New England District	3,850,000	274,000	TBD	400,000	TBD

The Merrimack River originates in Franklin, New Hampshire at the confluence of the Pemigewasset and Winnipesaukee Rivers and flows southerly towards the Massachusetts border then easterly towards the coast. The Merrimack River basin encompasses an approximate 5,010 square miles area in Massachusetts and New Hampshire. Significant improvements have been made to improve the overall quality of the Merrimack River. Federal and state agencies, communities and the private sector have made substantial investments in wastewater treatment plants to address point source pollution. However, elimination of combined sewer outfalls (CSOs) is needed to fully restore the ecosystem to support habitat for anadromous fisheries, a source of drinking water, and provide a recreational resource for the region. The US Environmental Protection Agency is requiring the communities of Haverhill, Lawrence, and Lowell in Massachusetts and Manchester and Nashua in New Hampshire to address eliminating CSOs discharges into the Merrimack River. Current estimates for eliminating CSOs is over $500 million and the five communities are concerned with the high cost. These communities have formed the Merrimack CSO Coalition and are requesting that studies be conducted to identify less costly options to eliminate CSOs in their communities, as well as opportunities to restore anadromous fisheries, improve fish and wildlife habitat, restore degraded wetlands, address low flow issues, and improve the river's water quality. A study cost-sharing agreement was executed on February 20, 2002 with the City of Lowell, representing the Merrimack CSO Coalition,

Fiscal Year 2003 funds are being used to continue the study phase, including data collection and evaluation, problem identification and development of a quality assurance project plan. Funds requested for fiscal year 2004 will be used to continue the study phase, including completion of data collection and watershed modeling and evaluation. The estimated cost of the study is $7,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$7,600,000
Cost Sharing Agreement	100,000
Comprehensive Study (Federal)	3,750,000
Comprehensive Study (Non-Federal)	3,750,000

The study schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW YORK					
Delaware River Basin Comprehensive, NY, NJ, DE & PA Philadelphia District	2,100,000	250,000	TBD	50,000	TBD

The Delaware River basin is located in 42 counties in portions of New York, New Jersey, Delaware and Pennsylvania, draining an approximate 13,539 square mile area. The river basin has experienced considerable degradation over the past two hundred years due to urbanization and industrialization. In addition, the river basin includes the Atlantic Flyway, the final stopover for millions of migratory birds. The river basin is divided into the upper and lower basins. The upper basin area includes small rural and agricultural communities, some heavily populated and industrialized areas, and abandoned mining complexes, which are experiencing developmental, recreational, and environmental pressures; and acid mine drainage problems from over twenty locations. The lower basin from Trenton to Philadelphia through Delaware Bay, is highly urbanized and industrialized, and includes upland disposal sites for several navigation projects that have degraded thousands of acres of wetlands that support fish and wildlife habitats.

The study will utilize a holistic approach to problem resolution including: ecosystem restoration, dredged material disposal, water quality control (to include acid mine drainage abatement with dredged material), floodplain management and flood damage reduction. The study will be coordinated with ongoing initiatives, such as, Pennsylvania's 21st Century Environment Commission and Growing Greener Restoration Program, New Jersey's Division of Watershed Management, and Delaware's Northern Delaware's Wetland Rehabilitation Program. On September 29, 1999, the Governors of Delaware, New Jersey, New York and Pennsylvania signed a resolution directing the development of a "new comprehensive water resources plan for the basin". This study is being conducted pursuant to Section 729 of the Water Resources Development Act of 1986. The potential non-Federal sponsor for the study is the Delaware River Basin Commission, who understands the financial requirements for the study. The study cost-sharing agreement schedule is being determined.

Fiscal year 2003 funds are being used to finalize the scope of work for the study phase and the cost-sharing agreement. The funds requested for fiscal year 2004 will be used to initiate the study, including formulation of alternative plans, economic and environmental analyses, and coordination with local interests. The

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
Delaware River Basin Comprehensive, NY, NJ, DE & PA Philadelphia District					

preliminary estimated cost of the study phase is $3,300,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$3,750,000
Cost Sharing Agreement (Federal)	450,000
Comprehensive Study (Federal)	1,650,000
Comprehensive Study (Non-Federal	1,650,000

The study schedule is being determined.

Subtotal Comprehensive Studies – Continuing	5,950,000	524,000	TBD	450,000	TBD
Total Surveys – Continuing	108,801,000	21,792,000	TBD	7,678,000	TBD

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – NEW: None.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – CONTINUING

a. Watershed/Ecosystem: The amount of $75,000 is requested in fiscal year 2004 for one watershed/ecosystem PED activity.

VIRGINIA

Elizabeth River Basin, Environmental Restoration, Hampton Roads - Norfolk District	583,000	179,000	TBD	75,000	TBD

The project area includes Scuffletown Creek, a tributary to the Southern Branch of the Elizabeth River Basin, located within the cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach. Bottom sediments within the creek have been contaminated by three hundred years of industrial and commercial development making Scuffletown Creek one of the nation's most contaminated waterways with limited wetlands to support wildlife and filter pollution. The feasibility study, completed in July 2001, recommended an environmental restoration project to remove or clean-up 60,000 cubic yards of sediment in Scuffletown Creek. The feasibility study also recommended eight ecosystem restoration projects to restore 22 acres of marine tidal wetlands located throughout the Elizabeth River Basin to be accomplished under the Continuing Authorities Section 206 program. The estimated project cost for the Scuffletown Creek is $13,600,000, with an estimated federal cost of $8,900,000 and an estimated non-Federal cost of $4,700,000. No benefit-cost ratio has been computed for this project because it is an ecosystem restoration project and benefits are not quantifiable in monetary terms. The Commonwealth of Virginia, and the Cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach, Virginia, fully understand the cost-sharing requirements for the design agreement. The design agreement schedule is being determined. Preconstruction engineering and design will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design effort at 25 percent non-Federal. Any adjustment that may be necessary to bring the non-Federal construction in line with the project cost sharing will be accomplished in the first year of construction. This project will be implemented under the authority of Section 312(b) of WRDA 1990, as amended.

Consistent with the cost sharing and financing concepts exacted by the Water Resources Development Act of 1986 and 1996, local interests are required to provide all lands, easements, rights-of-ways, relocations, and disposal areas, and pay 35 percent of all costs allocated to environmental protection and restoration.

Total Estimated Preconstruction Engineering and Design Cost	$777,000	Total Estimated Preconstruction Engineering and Design Cost	$777,000
Initial Federal Share	583,000	Ultimate Federal Share	505,000
Initial Non-Federal Share	194,000	Ultimate Non-Federal Share	272,000

Fiscal Year 2003 funds will be used to initiate the preconstruction engineering and design, including final design plans and preparation of plans and specifications. The funds requested for Fiscal Year 2004 will be used to finalize the plans and specifications. The schedule for the PED effort is being determined.

Subtotal Watershed/Ecosystem PED Activity – Continuing	583,000	179,000	TBD	75,000	TBD

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – CONTINUING					
b. Navigation: The amount of $ 694,000 is requested in fiscal year 2004 for one navigation PED activity.					
VIRGINIA					
Atlantic Intracoastal Waterway Bridge at Deep Creek Norfolk District	1,800,000	875,000	TBD	694,000	TBD

The Atlantic Intracoastal Waterway is an inland navigation route that parallels the Atlantic coast from Massachusetts to Florida. Many highway bridges cross the waterway , which are the responsibility of the Corps of Engineers to operate. One of these bridges, located in the Deep Creek community of Chesapeake, Virginia, was constructed in 1934 and crosses U.S. Route 17 over the Dismal Swamp Canal portion of the waterway. The city of Chesapeake requested that the bridge be modified or replaced in conjunction with the City's plans to improve area's roadway and Commonwealth of Virginia plans to improve U.S. Route 17 south of the bridge. The feasibility study, completed in April 2001, found that the existing 66-foot-long, two-lane bridge is functionally obsolete and has poor alignment with the connecting roads. The recommended project would replace the bridge with a five-lane, double leaf, rolling-lift bascule bridge. The project cost is estimated to be $22,000,000, all federally funded. The average annual benefits amount to $15.5 million, all for transportation savings, based on the latest economic analysis dated May 2002. The benefit-cost ratio is 2.3 to 1. The potential project sponsor is City of Chesapeake, Virginia. Preconstruction engineering and design (PED) will ultimately be funded at the rate for the project to be constructed, but is being financed through the PED period at 100 percent Federal funds because inland navigation projects are exempt from the 25 percent non-Federal financing requirement. The City of Chesapeake, Virginia, understands its financial responsibilities and has agreed to assume ownership of the new bridge along with all operation, maintenance, repair, replacement, and rehabilitation responsibilities.

Total Estimated Preconstruction Engineering and Design Cost	$1,800,000	Total Estimated Preconstruction Engineering and Design Cost	$1,800,000
Initial Federal Share	1,800,000	Ultimate Federal Share	1,800,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	0

Consistent with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986, local interests are required to provide all lands, easements, rights-of-way, relocations, approaches, and any costs associated with widening culverts or other structures, bear all costs of betterments to the project, and provide all costs of operation, maintenance of the bridge.

Fiscal Year 2003 are being used to continue preconstruction engineering and design, including preparation of plans and specifications, and local coordination. The funds requested for fiscal year 2004 funds will be used to finalize plans and specifications and local coordination. The PED effort schedule is being determined.

Subtotal Navigation PED Activity – Continuing	1,800,000	875,000	TBD	694,000	TBD

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – CONTINUING

c. Beach Erosion Control: The amount of $753,000 is requested in fiscal year 2004 for two beach erosion control PED activities.

DELAWARE

Delaware Coast from Cape Henlopen to Fenwick Island, Fenwick Island - Philadelphia District	514,000	200,000	TBD	214,000	TBD

This project is located along the Atlantic coast of Delaware State in Sussex County, one mile north of the Delaware-Maryland border. Fenwick Island suffered major storm damages from tidal surges and wave attacks in March 1962, January 1992, and January 1996, with damages amounted to $16,700,000, $1,000,000 and $700,000, respectively. The feasibility study for the Fenwick Island area, completed in June 2000, recommended a hurricane and storm damage reduction project consisting of a beach berm 75 feet wide, 6,500 feet long at an elevation of +7.7 feet NAVD with a dune system at elevation +17.7 feet NAVD. The initial beachfill will place some 595,400 cubic yards of sand. Subsequent periodic nourishment will be required every four years over the 50-year project life, placing about 320,000 cubic yards of sand. The estimated initial project cost is $6,900,000, with an estimated Federal cost of $4,500,000 and an estimated non-Federal cost of $2,400,000. The average annual benefits amount to $2,785,000, all for hurricane and storm damage reduction savings, based on the latest economic analysis dated October 1999. The benefit-cost ratio is 2.1 to 1. The design agreement was executed in May 2002 with the Delaware Department of Natural Resources and Environmental Control. Preconstruction engineering and design phase will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contributions in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$685,000	Total Estimated Preconstruction Engineering and Design Costs	$685,000
Initial Federal Share	$514,000	Ultimate Federal Share	$445,000
Initial Non-Federal Share	$171,000	Ultimate Non-Federal Share	$240,000

The Water Resources Development Act of 2000 authorized the project for construction. In accordance with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986, as amended, local interests are required to provide all lands, easements, rights-of-way, and relocations necessary for the construction, estimated at $200,000; pay 35 percent of initial project costs allocated to hurricane and storm damage reduction, estimated at $2,200,000; and pay 50 percent of the cost of periodic nourishment for the 50 year life of the project every 4 years, estimated at $2,200,000.

Fiscal Year 2003 funds are being used to continue preconstruction engineering and design efforts, including preparation of plans and specifications. The funds requested for Fiscal Year 2004 funds will be used to finalized preconstruction engineering and design, including plans and specifications, and coordination of the environmental documentation and the draft Project Cooperation Agreement. The preconstruction engineering and design effort schedule is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
NEW JERSEY					
Great Egg Harbor Inlet to Townsends Inlet Philadelphia District	1,043,000	180,000	TBD	539,000	TBD

This project area is located along the Atlantic coast of New Jersey in Cape May County about 8 miles South of Atlantic City, New Jersey, and includes the coastal barrier islands of Peck Beach and Ludlam Beach. The March 1962 storm damaged 2,629 structures with damages estimated at $24,300,000. The December 1992 storm caused damages to the area estimated at $1,300,000. The feasibility report, completed in September 2001, recommended a hurricane and storm damage reduction project consisting of a 100-foot wide berm and dune system at elevation +13 NAVD for the southern end of project at Ocean City, New Jersey, and a 50-foot wide berm and dune system at elevation of +15 NAVD for Ludlam Beach. Periodic nourishment will be required every 3 years on Peck Beach and every 5 years on Ludlam Beach for the 50-year project life. The initial estimated project cost is $46,100,000, with an estimated Federal cost of $30,000,000 and an estimated non-Federal cost of $16,100,000. The average annual benefits amount to $4,237,000 for the south end of the Peck Beach Island portion and $6,351,000 for the Ludlam Beach Island portion of the project, all for hurricane and storm damage reduction savings, based on the latest economic analysis dated October 2001. The benefit-cost ratio is 1.9 to 1 and 1.5 to 1 for each project portion, respectively. The design agreement was executed in September 2002 with the New Jersey Department of Environmental Protection. Preconstruction engineering and design phase will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contributions in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$1,391,000	Total Estimated Preconstruction Engineering and Design Costs	$1,391,000
Initial Federal Share	1,043,000	Ultimate Federal Share	904,000
Initial Non-Federal Share	348,000	Ultimate Non-Federal Share	487,000

Consistent with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986 as amended, local interest are required to provide all lands, easements, rights-of-way, and relocations necessary for the construction, estimated at $420,000; pay 35 percent of costs allocated to beach erosion control, estimated at $15,680,000; and pay 50 percent of the cost of periodic nourishment for the 50 year life of the project every 3 years for the Peck Beach Island project portion and every 5 years for the Ludlum Beach Island project portion, estimated at $925,000.

Fiscal Year 2003 funds are being used to continue preconstruction engineering and design efforts, including preparation of plans and specifications. The funds requested for Fiscal Year 2004 funds will be used to continue preconstruction engineering and design, including plans and specifications, and coordination of the environmental documentation and the draft Project Cooperation Agreement. The preconstruction engineering and design effort schedule is being determined.

Subtotal Beach Erosion Control PED Activity – Continuing	1,557,000	380,000	TBD	753,000	TBD

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional to Complete After FY 2004 $
4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – CONTINUING					
d. Flood Control: None.					
e. Multiple Purpose Power: None.					
TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – CONTINUING	3,940,000	1,434,000	TBD	1,522,000	TBD
GRAND TOTAL SURVEYS AND PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES	112,741,000	23,226,000	TBD	9,200,000	TBD

APPROPRIATION TITLE: Construction, General - Navigation (Deep Draft)

PROJECT: Delaware River Main Channel, New Jersey, Pennsylvania, and Delaware (continuing)

LOCATION: The project extends over 100 miles from deep water in Delaware Bay to the tri-state, Ports of the Delaware River including Philadelphia and Beckett Street Terminal, Camden, New Jersey. It involves the Commonwealth of Pennsylvania, and the States of New Jersey and Delaware.

DESCRIPTION: The recommended plan of improvement deepens the existing Federal navigation Channel (Philadelphia to the Sea project) from the 40 foot project to 45 feet, widens bends, deepens an anchorage along with relocation and addition of navigation aids.

AUTHORIZATION: Section 101(6) Water Resources Development Act of 1992, as modified by Section 308 Water Resources Development Act of 1999 and by Section 306 Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 1.14 to 1 at 5 7/8 percent (See footnote)

TOTAL BENEFIT-COST RATIO: 1.14 to 1 at 5 7/8 percent, based on the Comprehensive Economic Reanalysis Report dated December 2002. (See footnote)

INITIAL BENEFIT-COST RATIO: 1.14 to 1 at 5 7/8 percent, based on the Comprehensive Economic Reanalysis Report dated December 2002.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Comprehensive Economic Reanalysis Report, dated December 2002, at May 2002 price levels.

SUMMARIZED FINANCIAL DATA: (See footnote)

Estimated Appropriation Requirement (CoE)		187,000,000
Estimated Appropriation Requirement (USCG)		380,000
Estimated Total Appropriation Requirement		187,380,000
Future Non-Federal Reimbursement		11,205,000
Estimated Federal Cost (Ultimate) (CoE)		175,795,000
Estimated Non-Federal Cost		110,313,000
Cash Contributions	62,238,000	
Other Costs	36,870,000	
Reimbursements: Comml Navigation	11,205,000	
Total Estimated Project Cost		286,108,000

STATUS: (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Channel Dredging:	0	TBD
Entire Project	0	TBD

PHYSICAL DATA:

Channel: Channel deepening (dredging of about 103 miles; widening and deepening of bends; deepening of an anchorage.

Disposal Construction: Three confined upland disposal areas and two beneficial use areas.

Navigation aids: Relocation and additional navigation aids

Division: North Atlantic District: Philadelphia Delaware River Main Channel, NJ, PA & DE

SUMMARIZED FINANCIAL DATA: (Cont)

		ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 2002	16,009,000	
Conference Allowance for FY 2003	TBD	
Allocation for FY 2003	TBD	
Allocations through FY 2003	TBD	
Allocation Requested for FY 2004	300,000	
Programmed Balance to Complete after FY 2004	TBD	
Unprogrammed Balance to Complete after FY 2004	0	

JUSTIFICATION: The existing 40-foot Federal navigation project restricts movement of some tankers, dry bulk carriers, and containerized cargo vessels, resulting in transportation delays from light loading and lightering of vessels entering the Delaware River port system. The deeper 45-foot project would reduce transportation cost by allowing the Maritime industry to use deeper draft vessels to move these commodities. In addition, the project will reuse dredged material to reduce overall dredging costs. In 2000, 82 million short tons of dry bulk commodities and 70.8 million short tons of crude oil imports used the Delaware River port system. The average annual benefits are $24,659,000, of which $24,054,000 are for transportation cost savings and $605,000 are for beneficial reuse cost savings, based on the Comprehensive Economic Reanalysis Report, dated December 2002 at May 2002 prices. (See footnote)

FISCAL YEAR 2004: The requested amount will be applied as follows:

Further Coordination Activities	$300,000
Total	$300,000

Division: North Atlantic District: Philadelphia Delaware River Main Channel, NJ, PA & DE

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below: (See footnote)

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights-of-way	$13,690,000	
Pay 100 percent of costs to modify local service facilities, where necessary, for the construction of the project.	23,180,000	$137,500
Reimburse an additional 10 percent of the general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, and relocation provided for commercial navigation.	11,205,000 1/	
Pay 25 percent of the costs allocated to general navigation features during construction. .	62,238,000	$3,134,700
Total Non-Federal Cost	$110,313,000	$3,272,200

The non-Federal sponsor has also agreed to repay its share of construction costs during construction and reimburse its share of construction costs over a period of 30 years following completion of construction.

1/ Reimbursement reduced to account for credits for lands, easements, and rights-of-way.

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement (PCA) execution schedule has not been determined. The Delaware River Port Authority is the non-Federal sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $187,000,000 is a decrease of $56,000,000 from the latest estimate ($243,000,000) presented to Congress (FY 2003). This change includes the following item: (See footnote)

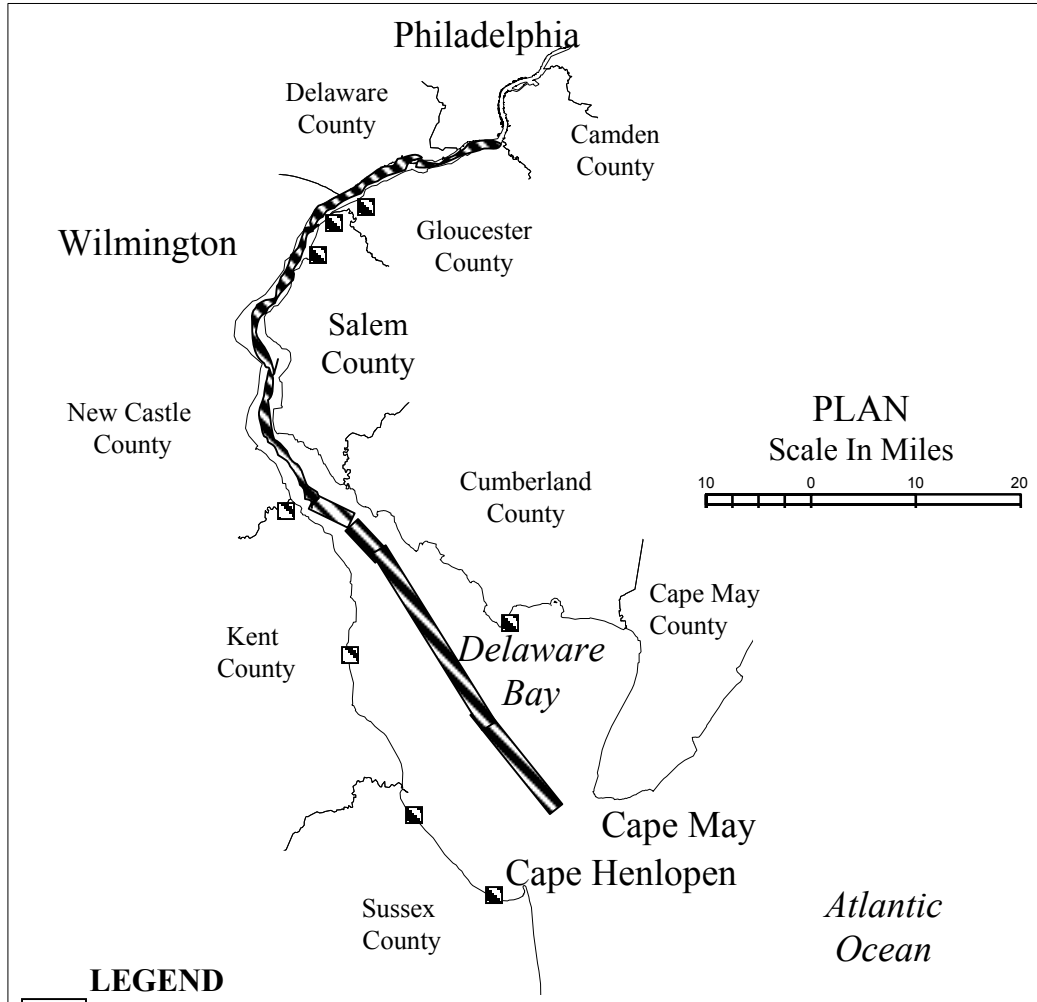
Item	Amount
Price Escalation on Construction Features	$ 7,000,000
Other Estimating Adjustments	$-63,000,000
Total	$-56,000,000

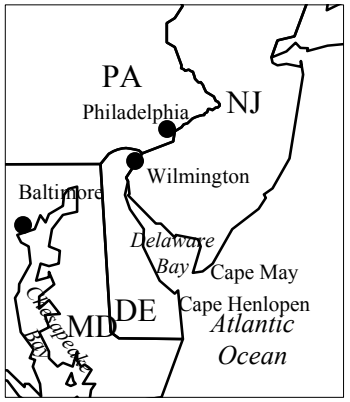
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: As part of the preconstruction engineering and design (PED) effort, a Supplemental Environmental Impact Statement (SEIS) was prepared in December 1996. The Final Supplemental Environmental Impact Statement was filed with U.S. Environmental Protection Agency in July 1997, and the Record of Decision was signed in December 1998.

Division: North Atlantic District: Philadelphia Delaware River Main Channel, NJ, PA & DE

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1992 and funds to initiate construction were appropriated in FY 1999. The General Accounting Office (GAO) published a report in June 2002 that found serious flaws and miscalculation in the project economic analysis, and recommended that a Comprehensive Economic Reanalysis be prepared before the project could proceed to construction. A report dated December 2002 is being coordinated with GAO while pre-PCA coordination with the states of New Jersey and Delaware continues. The objective is to resolve the questions that have been raised regarding the economic justification and environmental acceptability of the project.

Footnote: The costs and benefits are based on the Comprehensive Economic Reanalysis dated December 2002. Further coordination of the Comprehensive Economic Reanalysis is ongoing.





LEGEND

None	WORK COMPLETED AS OF 30 SEP 2002
None	WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
None	WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
	WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004

Delaware River Main Channel Deepening Project

1 January 2003

Scale as Shown

U.S. Army Engineer District Phila., PA

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: New York & New Jersey Harbor, New York and New Jersey (Continuing)

LOCATION: The Port of New York and New Jersey is located within the NY/NJ Harbor Estuary shared between the states of New York and New Jersey and consists of various navigation channels. These channels include: Ambrose Channel; Anchorage Channel; Kill Van Kull and Newark Bay Channel; Arthur Kill Channel; Port Jersey Channel; and, Bay Ridge and Red Hook Channel.

DESCRIPTION: This project consolidates four authorized projects.
1.) The Kill Van Kull and Newark Bay Channels, NY and NJ project consists of deepening existing 40-foot project to 45 feet from the mean low-water (MLW). Unprogrammed work includes dredging of Pierhead Channel and Port Newark in the vicinity of Port Elizabeth.
2.) The New York Harbor and Adjacent Channels, Port Jersey Channel, NJ project consists of deepening the non-Federal access channel to 41 feet MLW from the Federal Anchorage Channel to its head of navigation, providing a turning basin at the head of navigation, and bulkheading portions of the turning basin.
3.) The Arthur Kill, Howland Hook Marine Terminal, NY and NJ project consists of deepening the existing Federal 35-foot Arthur Kill Channel to 41 feet MLW from its confluence with the Kill Van Kull Channel to Howland Hook Marine Terminal in Staten Island, New York, and to 40 feet MLW from the Howland Hook Marine Terminal to the Tosco Oil Terminal oil facilities, New Jersey and New York, respectively. Also included within the Arthur Kill Channel are selected widenings and realignments. The Arthur Kill Project also provides for mitigation consisting of restoration and enhancement of approximately 23 acres of intertidal salt marsh.
4.) The New York and New Jersey Harbor, NY and NJ, project consists of deepening the Ambrose Channel to 53 feet MLW; the Anchorage Channel, Kill Van Kull, Newark Bay, Port Jersey Channel, Bay Ridge Channel, and the Arthur Kill Channel to Howland Hook to 50 feet MLW and 52 feet MLW if in rock or otherwise hard material. Mitigation for project impacts, turning basins and selective bulkheading are included. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Acts of 1986, 1996, 1999, and 2000.

REMAINING BENEFIT - REMAINING COST RATIO: 3.0 to 1 at 6 5/8 percent

TOTAL BENEFIT - COST RATIO: 2.8 to 1 at 6 5/8 percent

INITIAL BENEFIT - COST RATIO: 2.8 to 1 at 6 5/8 percent (FY 2002)

BASIS OF BENEFIT - COST RATIO: The benefit-to-cost ratio shown above applies to the consolidation of the four authorized projects. The analysis reflects annualized costs and benefits, adjusted to October 2001 price levels.

SUMMARIZED FINANCIAL DATA		
Estimated Appropriation Requirement (CoE)		$1,761,200,000
Programmed Construction	$1,686,700,000	
Unprogrammed Construction	74,500,000	
Estimated Appropriation Requirement (USCG)		4,050,000
Estimated Total Appropriation Requirement		1,765,250,000
Future Non-Federal Reimbursement		249,546,800
Programmed Construction	240,454,800	
Unprogrammed Construction	9,092,000	
Estimated Federal Cost (Ultimate) (CoE)		1,511,653,200
Programmed Construction	1,446,245,200	
Unprogrammed Construction	65,408,000	
Estimated Non-Federal Cost		1,909,789,800
Programmed Construction	1,884,277,800	
Cash Contribution	1,282,678,000	
Other Costs	361,145,000	
Reimbursements:	240,454,800	
Unprogrammed Construction	25,512,000	
Cash Contribution	16,420,000	
Other Costs	0	
Reimbursements	9,092,000	
Total Estimated Programmed Construction Costs		$3,334,573,000
Total Estimated Unprogrammed Construction Costs		90,920,000
Total Estimated Project Cost		3,425,493,000

	ACCUM. CT OF EST FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Programmed work:				
KVK				
Phase I 40 ft.			100	Sep 1995
Phase II 45 ft.			50	TBD
Port Jersey Channel			0	TBD
Arthur Kill Channel			0	TBD
NY & NJ Harbor (50 ft)			0	TBD
Unprogrammed work:				
KVK			0	Indefinite
Entire Project:			18	Indefinite

PHYSICAL DATA

a. Deepen the Kill Van Kill and Newark Bay from 35 ft to 40 ft then to 45 ft
b. Deepen the Port Jersey Channel from 35 ft. to 41 ft.
c. Deepen the Arthur Kill Channel from its confluence with the Newark Bay to the Howland Hook Marine Terminal from 35 ft. to 40 ft and then from 35 ft to 40 ft to the TOSCO Terminal.
d. NY & NJ Harbor: Deepen the above channels from their depths to 50 ft., deepen the Ambrose Channel from 45 ft. to 53 ft. the Anchorage Channel from 45 ft. to 50 ft. and the Bay Ridge Channel from 40 ft. to 50 ft. Turning areas are provided for the Bay Ridge, Arthur Kill and Port Jersey Channels, along with mitigation for loss of benthic habitat and air quality.

SUMMARIZED FINANCIAL DATA: (continued)

Allocations to 30 September 2002	$339,180,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocation through FY 2003	TBD
Allocation Requested for FY 2004	115,000,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2004	TBD

JUSTIFICATION: The Port of New York-New Jersey is the largest port on the East Coast, providing more than 228,000 port related jobs, $12 billion in economic activity, and serves more than 17 million consumers in the States of New York and New Jersey. Through its intermodal links, the Port provides second day access to another 80 million consumers in the northeast and mid-western states. The Port annually receives and ships over $82 Billion (110 million long tons) of waterborne general cargo to all parts of the United States and throughout the world and receives petroleum and related products from ports in the Atlantic, and Gulf Coasts, the Caribbean, Africa, and the Persian Gulf.

FISCAL YEAR 2004: The requested amount will be applied as follows:

1. Continue Construction Contracts including Engineering, Design and S&A		$105,000,000
a) Kill Van Kull & Newark Bay, Areas 5,6,8	25,000,000	
b) NY Harbor & Adjacent Channels, Port Jersey, Areas 1 & 2	30,000,000	
c) Arthur Kill, Howland Hook Marine Terminal Areas 1 & 2	50,000,000	
2. Arthur Kill Wetland Mitigation Area		5,000,000
3. NY & NJ Harbor Deepening (50 Feet) Engineering and Design		5,000,000
TOTAL		$115,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the Requirements listed below:

REQUIREMENTS OF LOCAL COOPERATION:	Payments During Construction And Reimbursement	Annual Operation, Maintenance and Replacement Costs
Pay 100 percent of costs to modify local service facilities, where necessary, for the construction of the project.	$ 304,662,000	$205,000
Pay 25-50 percent of the costs allocated to deep draft navigation during construction. 1/	1,299,098,000	
Pay for all lands, easements, rights of way and relocations	56,483,000	
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction, which is partially offset by a credit allowed for the value of lands, easements, rights of way, and relocation.	249,546,800	
Contribute 50 percent of the annual charges for interest and amortization of the Federal first cost of the Port Jersey 41-foot project and 50 percent of the operations and maintenance until the improvement is serving/benefiting multiple owners/properties. (Approximately $3 million annually.) If multiple owners/properties are not established, the contribution could range to a maximum of $145,629,000.	0	
Total Non-Federal Costs	$1,909,789,800	$205,000

1/ The cost sharing percentage of this project includes the cost sharing of the general navigation features deepening to 45 feet at 25 percent and deepening of those features from 45 feet to 50 feet at 50%.

STATUS OF LOCAL COOPERATION:

(1) On the Kill Van Kull and Newark Bay Channels element, a Project Cooperation Agreement for the 45-foot deepening project was executed for the Phase II deepening on 13 January 1999.

(2) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, the State of New Jersey and the Port Authority of New York and New Jersey (for the limited purpose of indemnification only) are the Non-Federal sponsors of the project. The project cooperation agreement was executed on 18 July 2002.

(3) On the Arthur Kill, Howland Hook Marine Terminal element, The Port Authority of New York and New Jersey is the non-Federal sponsor for the project. The PCA was executed on 25 July 2002.

(4) On New York and New Jersey Harbor element, the Port Authority of NY & NJ by letter dated 27 February 1997 indicated they would be the primary local sponsor. The project cooperation agreement is scheduled to be executed in May 2004.

COMPARISON OF FEDERAL COST ESTIMATES: The current Corps of Engineers cost estimate of $1,761,200,000 is the same as the last estimate ($1,761,200,000) presented to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

(1) On the Kill Van Kull and Newark Bay Channels element, the Final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 31 July 1981. A Supplemental EIS was filed with EPA on 14 February 1986. The Final Supplement to the EIS was filed with EPA on 13 February 1987. The Record of Decision was executed on 1 April 1987. An Environmental Assessment and Finding of No Significant Impact was issued on 30 April 1997 as part of the LRR for the Phase II deepening.

(2) On NY Harbor and Adjacent Channels, Port Jersey Channel element, the final EIS was filed with EPA on 29 April 1988, and a final Environmental Assessment and Finding of No Significant Impact was issued June 2000. A Record of Decision was executed on 23 October 2000.

(3) On the Arthur Kill, Howland Hook Marine Terminal element, the Final Supplemental EIS was filed with EPA on 16 September 1998. A Final Environmental Assessment for mitigation was issued in May 2001. The Record of Decision was executed on 29 August 2001.

(4) On the 50-foot project, New York and New Jersey Harbor Deepening element, the final EIS was filed with EPA on 29 December 1999. The Record of Decision was signed on 6 June 2002.

OTHER INFORMATION:

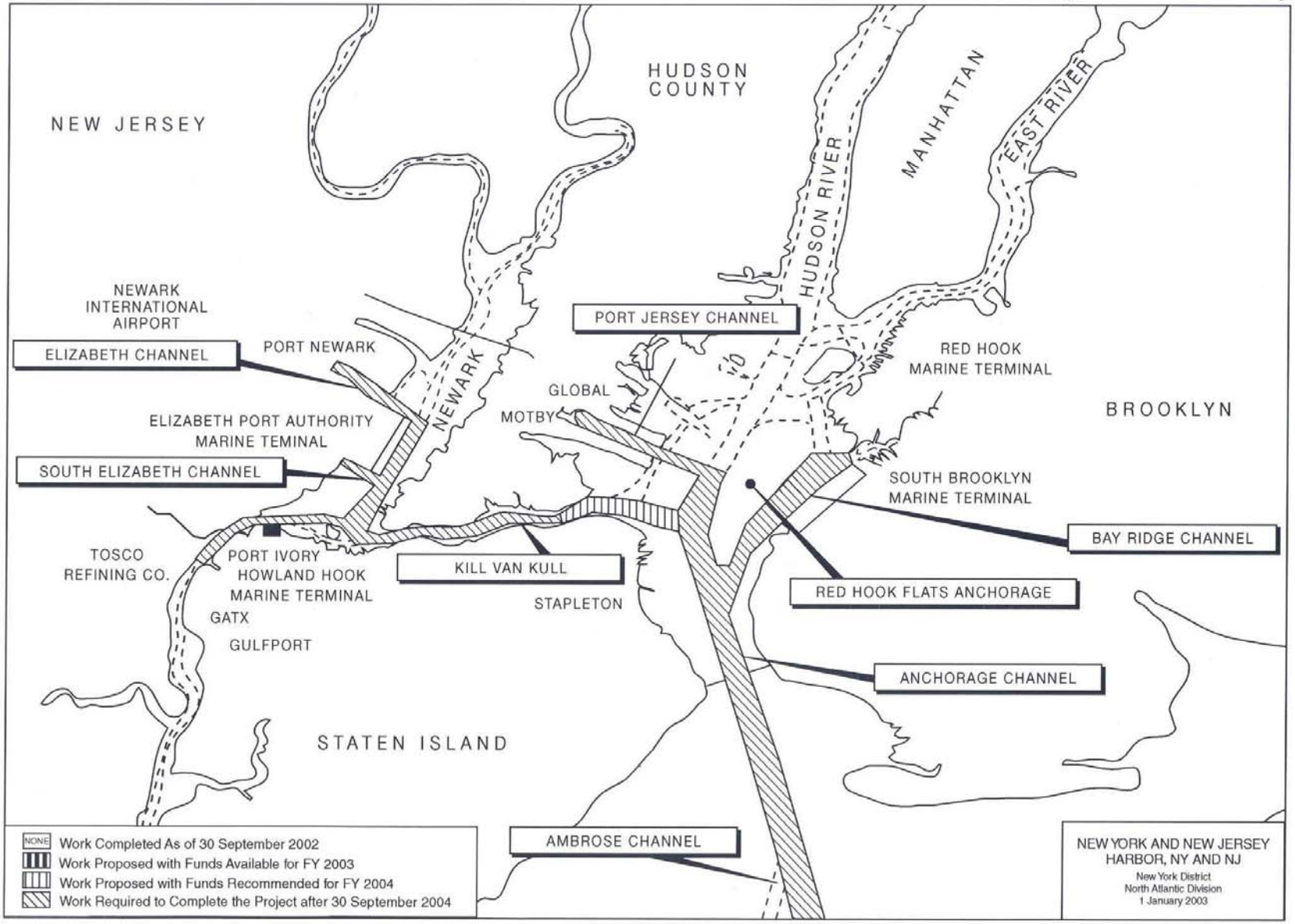
(1) All project elements were being funded separately prior to FY 2002. Congressional direction provided to the Secretary of the Army in the Energy and Water Development Appropriations, FY 2002, Conference Report consolidated the four project elements with the 50-foot deepening project authorized by the Water Resources Development Act of 2000. An updated Project Management Plan for the consolidated project was prepared in January 2003. This plan lays out the construction activities to consolidate ongoing interim depth construction with the overall deepening project. Critical to this analysis is the ongoing extensive close coordination with the States of New York and New Jersey, Port Authority of New York and New Jersey, the Environmental Protection Agency, US Coast Guard, and other interested agencies and public. Additional engineering and environmental analyses will be completed prior to the execution of the Project Cooperation Agreement for the 50-foot channels. Individual opportunities to advance work, such as consolidated drilling and blasting in the Kill Van Kull channel which began in FY 2002 will continue to be implemented.

(2) On the Kill Van Kull and Newark Bay Channels element, funds to initiate construction were appropriated in FY 1985.

(3) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1994.

(4) On the Arthur Kill, Howland Hook Marine Terminal element, funds for preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 2001.

(5) On the 50-foot New York and New Jersey Harbor Deepening element, funds to initiate preconstruction engineering and design were appropriated in FY 2000 and funds to initiate construction were appropriated in FY 2002.


NEW JERSEY
HUDSON COUNTY
HUDSON RIVER
MANHATTAN
EAST RIVER
NEWARK INTERNATIONAL AIRPORT
ELIZABETH CHANNEL
PORT NEWARK
NEWARK
PORT JERSEY CHANNEL
RED HOOK MARINE TERMINAL
GLOBAL
MOTBY
BROOKLYN
ELIZABETH PORT AUTHORITY MARINE TEMINAL
SOUTH ELIZABETH CHANNEL
SOUTH BROOKLYN MARINE TERMINAL
BAY RIDGE CHANNEL
TOSCO REFINING CO.
PORT IVORY
HOWLAND HOOK MARINE TERMINAL
KILL VAN KULL
STAPLETON
RED HOOK FLATS ANCHORAGE
GATX
GULFPORT
ANCHORAGE CHANNEL
STATEN ISLAND
AMBROSE CHANNEL
NONE Work Completed As of 30 September 2002
Work Proposed with Funds Available for FY 2003
Work Proposed with Funds Recommended for FY 2004
Work Required to Complete the Project after 30 September 2004
NEW YORK AND NEW JERSEY HARBOR, NY AND NJ
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Atlantic Intracoastal Waterway Bridge At Great Bridge, Virginia (Continuing)

LOCATION: The project is located in the community of Great Bridge, city of Chesapeake, in the southeastern portion of Virginia. The Atlantic Intracoastal Waterway bridge crosses the Albermarle and Chesapeake Canal which is a part of the Atlantic Intracoastal Waterway that connects the Southern Branch of the Elizabeth River and the North Landing River.

DESCRIPTION: The plan of improvement includes replacement of the existing Federal bridge with a five-lane, double-leaf, rolling-lift bascule also commonly known as a "Scherzer Rolling Lift Bridge." The replacement bridge provides five 12-foot lanes, two 2-foot shoulders and pedestrian walkways. The roadway centerline on the proposed bridge will be approximately 80 feet east of, and parallel to, the existing bridge centerline. Upon completion of the project the non-Federal Sponsor (City of Chesapeake) will assume ownership and provide OMRR and R for the new bridge and approaches.

AUTHORIZATION: Section 339 of the National Highway Systems Designation Act of 1995 (P.L. 104-59). A Post Authorization Change (PAC) is at the Assistant Secretary of the Army for Civil Works office (ASA(CW)) pending approval.

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 7 3/8 percent

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 7 3/8 percent

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 7 3/8 (FY 1998)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in July 1994 at October 1992 price levels.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT. OF EST. FED COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
			Bridge Replacement	50	TBD
Estimated Federal Cost		28,275,000 1/			
Estimated Non-Federal Cost		4,318,000 1/			
Cash Contributions	4,238,000				
Other Costs	80,000				
Total Estimated Project Cost		32,593,000 1/			
Allocations to 30 September 2002		15,147,000			
Conference Allowance for FY 2003		TBD			
Allocation for FY 2003		TBD			
Allocations through FY 2003		TBD			
Allocation Requested for FY 2004		9,706,000			
Programmed Balance to Complete after FY 2004		TBD			

PHYSICAL DATA BRIDGE:		
TYPE	LENGTH	DECK ELEVATION
Dbl Leaf Rolling Lift Bascule	304 ft.	13.0 ft NGVD

1/ Upon approval of the Post Authorization Change, the total cost estimate will be $47,218,000 (Oct 2002 price level) with a Federal cost estimate of $38,248,000.

JUSTIFICATION: The present bridge, which was built by the Corps of Engineers, was opened to traffic in August 1943. The bridge is now functionally obsolete. It is a double-swing two-lane highway bridge carrying Virginia's Route 168 over the Albermarle and Chesapeake Canal. At the time the bridge was built, it had adequate vehicle capacity for a rural area. However, the bridge now connects a multi-lane highway through a heavily traveled area serving a busy urban commercial center. The bridge is seriously overloaded, carrying over 30,000 vehicles per day, which is double its design capacity. Navigation is also adversely affected due to restrictions on bridge openings. Updating of the mechanical and electrical equipment is now needed. Structural problems have required the bridge to be down-posted from 15 to 13 tons. While maintenance and repairs are an alternative to replacing the bridge, it is likely that increased cost for repairs or further weight limit downposting is likely as the bridge continues to age.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue construction	$8,251,000
Construction Management	1,455,000
Total	$9,706,000

Division: North Atlantic District: Norfolk Atlantic Intracoastal Waterway Bridge At Great Bridge, VA

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, relocations, and approaches	$4,318,000	
Total Non-Federal Costs	$4,318,000	$215,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and will assume ownership and all operation, maintenance, repair, replacement, and rehabilitation responsibilities of the bridge.

STATUS OF LOCAL COOPERATION: The city of Chesapeake is the non-Federal project sponsor. By City Council Resolution dated 8 June 1999 and by letter dated 9 June 1999, the city indicated their support and willingness to enter into a Project Cooperation Agreement (PCA) prior to initiation of construction. In addition, the city agreed to assume ownership and all operation, maintenance, repair, replacement, and rehabilitation responsibilities, and provide the incremental costs of any locally preferred options. The non-Federal sponsor is fully capable of providing its share of funds for the bridge replacement through its City Wide Debt Fund Balance. The PCA was executed on 22 November 1999.

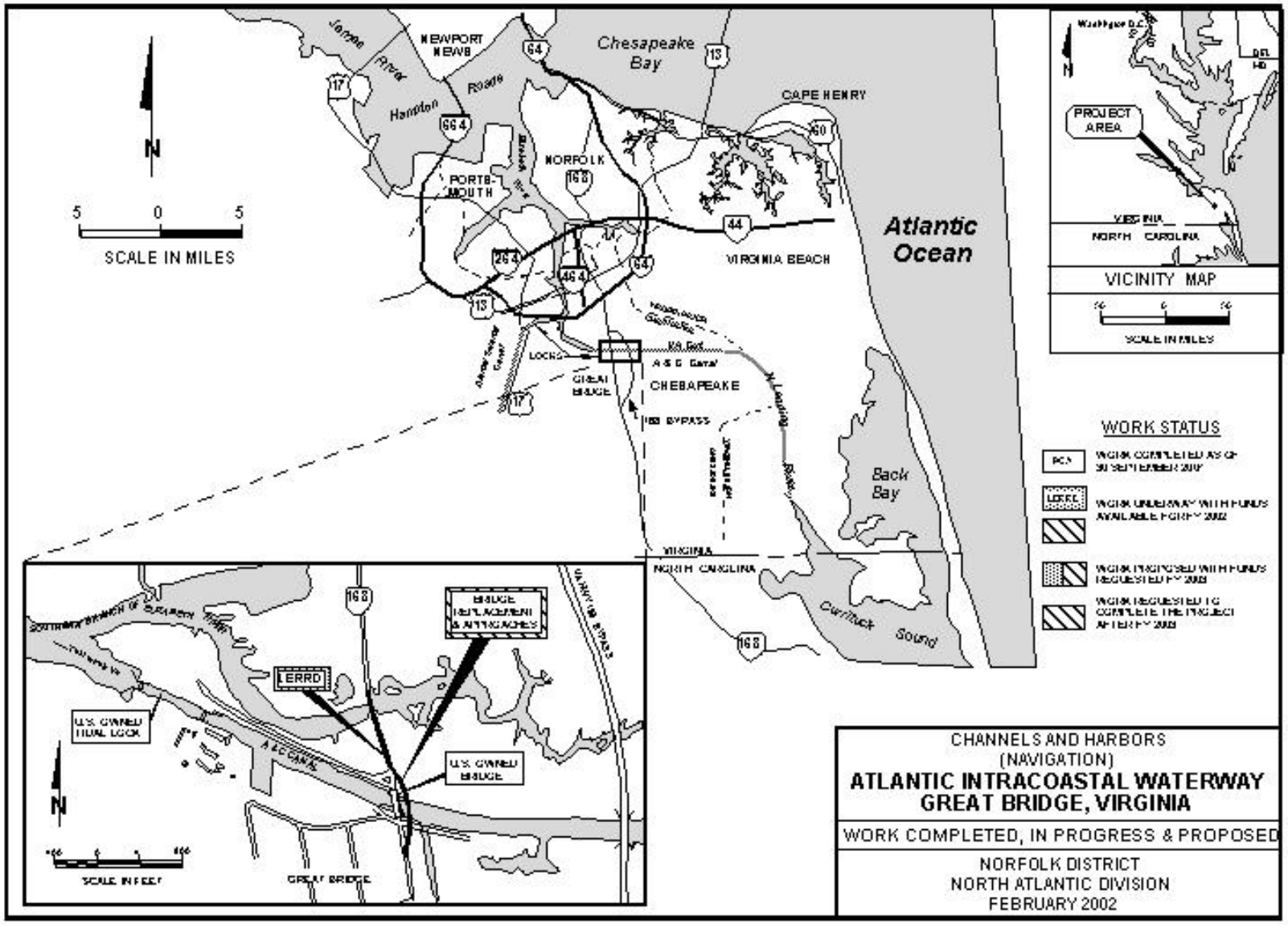
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $28,275,000 is an increase of $4,221,000 from the latest estimate ($24,054,000) presented to Congress (FY 2003). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	$4,221,000
Total	$4,221,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment/Finding of No Significant Impact (EA/FONSI) was signed on 25 February 1994.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1998.

Division: North Atlantic District: Norfolk Atlantic Intracoastal Waterway Bridge At Great Bridge, VA


Chesapeake Bay
Atlantic Ocean
NEWPORT NEWS
Hampton Roads
PORTSMOUTH
NORFOLK
CAPE HENRY
VIRGINIA BEACH
GREAT BRIDGE LOCKS
CHESAPEAKE
Back Bay
Currituck Sound
VIRGINIA
NORTH CAROLINA
SCALE IN MILES
PROJECT AREA
VICINITY MAP
WORK STATUS
LERRD
BRIDGE REPLACEMENT & APPROACHES
U.S. OWNED TIDAL LOCK
U.S. OWNED BRIDGE
A&C CANAL
SCALE IN FEET
GREAT BRIDGE
CHANNELS AND HARBORS
(NAVIGATION)
ATLANTIC INTRACOASTAL WATERWAY
GREAT BRIDGE, VIRGINIA
WORK COMPLETED, IN PROGRESS & PROPOSED
NORFOLK DISTRICT
NORTH ATLANTIC DIVISION
FEBRUARY 2002

APPROPRIATION TITLE: Construction, General –Navigation Mitigation and Hurricane and Storm Damage Reduction

PROJECT: Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE (Continuing)

LOCATION: Project area is located in Sussex County in Southern Delaware at the entrance to the Delaware Bay. Sussex County is one of three counties in the State of Delaware. It is bordered on the east by the Atlantic Ocean, on the south and west by Maryland, and on the north by Kent County. The study area of Lewes Beach which is situated between the Lewes and Rehoboth Canal and Delaware Bay consists of 2 miles of beach from Roosevelt Inlet to the Cape May-Lewes Ferry Terminal.

DESCRIPTION: The plan for the purposes of navigation mitigation and hurricane and storm damage reduction consists of a 25-foot wide berm at an elevation of +8.0 feet NAVD, and a dune at an elevation of +14.0 feet NAVD over a total project length of 1,400 feet. The total project width of the berm and dune, including side slopes, is 100 feet. The plan includes dune grass, dune fencing and suitable advance beachfill and periodic nourishment every six years over the 50-year project life to ensure the integrity of the design. The plan also provides for reconstruction of the south jetty at Roosevelt Inlet.

AUTHORIZATION: Section 101 (a) (13) of WRDA 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 6 5/8 percent

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 6 5/8 percent

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 6 5/8 percent (FY 2002)

BASIS OF BENEFIT-COST RATIO: Benefits and costs (October 1998 price level) are based on the Chief of Engineers Report dated 03 February 1999.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		$ 31,400,000
Initial Construction	3,021,000	
Periodic Nourishment	28,379,000	
Estimated non-Federal Cost		$ 9,200,000
Initial Construction	1,011,500	
Cash Contributions	993,500	
Other Costs	18,000	
Periodic Nourishment	8,188,500	
Other Costs	0	
Cash Contributions	8,188,500	
Total Estimated Project Cost		$ 40,600,000
Initial Construction	4,032,500	
Periodic Nourishment	36,567,500	

	ACCUMULATED PCT OF EST. FED. COST
Allocations to 30 September 2002	513,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocations through FY 2003	TBD
Allocations Requested for FY 2004	2,008,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2004	0

STATUS: (1 Jan 2003)	PERCENT COMPLETE	COMPLETION SCHEDULE
Initial Beachfill	0	Sep 2004
Periodic Nourishment	0	TBD
Entire Project	0	TBD

PHYSICAL DATA:
Beachfill: 25-foot wide berm at an elevation of +8.0 feet NAVD and 75-foot wide dune at an elevation of +14.0 feet NAVD over a total project length of 1,400 feet. Dune grass and dune fencing. Periodic Nourishment: every 6 years
Periodic Nourishment: every 6 years

JUSTIFICATION: Federal navigation works in the vicinity of Lewes Beach are the primary cause of the shoreline erosion at Lewes Beach. These navigation works include a breakwater that provides a harbor of refuge inside Cape Henlopen and jetties and a navigation channel at Roosevelt Inlet. The Federal navigation works have interrupted the natural longshore sand transport, resulting in accelerated shoreline erosion at Lewes Beach. The impacts of the Federal navigation works leave the community of Lewes Beach at a greater risk to damages from hurricanes and coastal storms.

Progressive and constant erosion is evident in certain areas of the bay shoreline. Despite shore protection measures undertaken by both the Federal Government and the State of Delaware, sections of the shoreline in the study area continue to erode. Long term erosion of the beachfront along the Delaware Bay has resulted in a persistent reduction in storm damage protection. The proximity of roads to the shoreline and the concentration of homes in Lewes Beach can result in significant economic damages in the event of a major storm. The highest elevation of water recorded for Lewes, DE was 7.1 feet (NAVD) for the March 1962 northeaster. Storm damages were estimated at $5.4 million at that time along the Delaware bayshore communities. Storm damages at Lewes Beach were estimated at $1.6 million.

Division: North Atlantic District: Philadelphia Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE

JUSTIFICATION: (continued)
Average annual benefits are $602,000 (October 1998 price level).

FISCAL YEAR 2004: The requested amount will be applied as follows:

Complete initial beachfill	$ 1,794,000
Construction Management	214,000
Total	$ 2,008,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide 35 percent of the initial construction costs assigned to the non-mitigation portion of the project for hurricane and storm damage reduction and, for the impacts attributable to Federal navigation works, share in the costs in the same proportion as the cost sharing provisions applicable to the project causing the erosion impacts (26 percent of project costs assigned to mitigation of jetty impacts).	$993,500	
Provide all lands, easements, rights-of-way, and relocations.	18,000	
Provide during construction 35 percent of each periodic nourishment costs assigned to the non-mitigation portion of the project for hurricane and storm damage reduction and, for the impacts attributable to Federal navigation works, share in the periodic nourishment costs in the same proportion as the cost sharing provisions applicable to the project causing the erosion impacts (26 percent of project costs assigned to mitigation of jetty impacts).	8,188,500	
Bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the completed project.		$17,000
Total Non-Federal Cost	$9,200,000	$17,000

Division: North Atlantic District: Philadelphia Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE

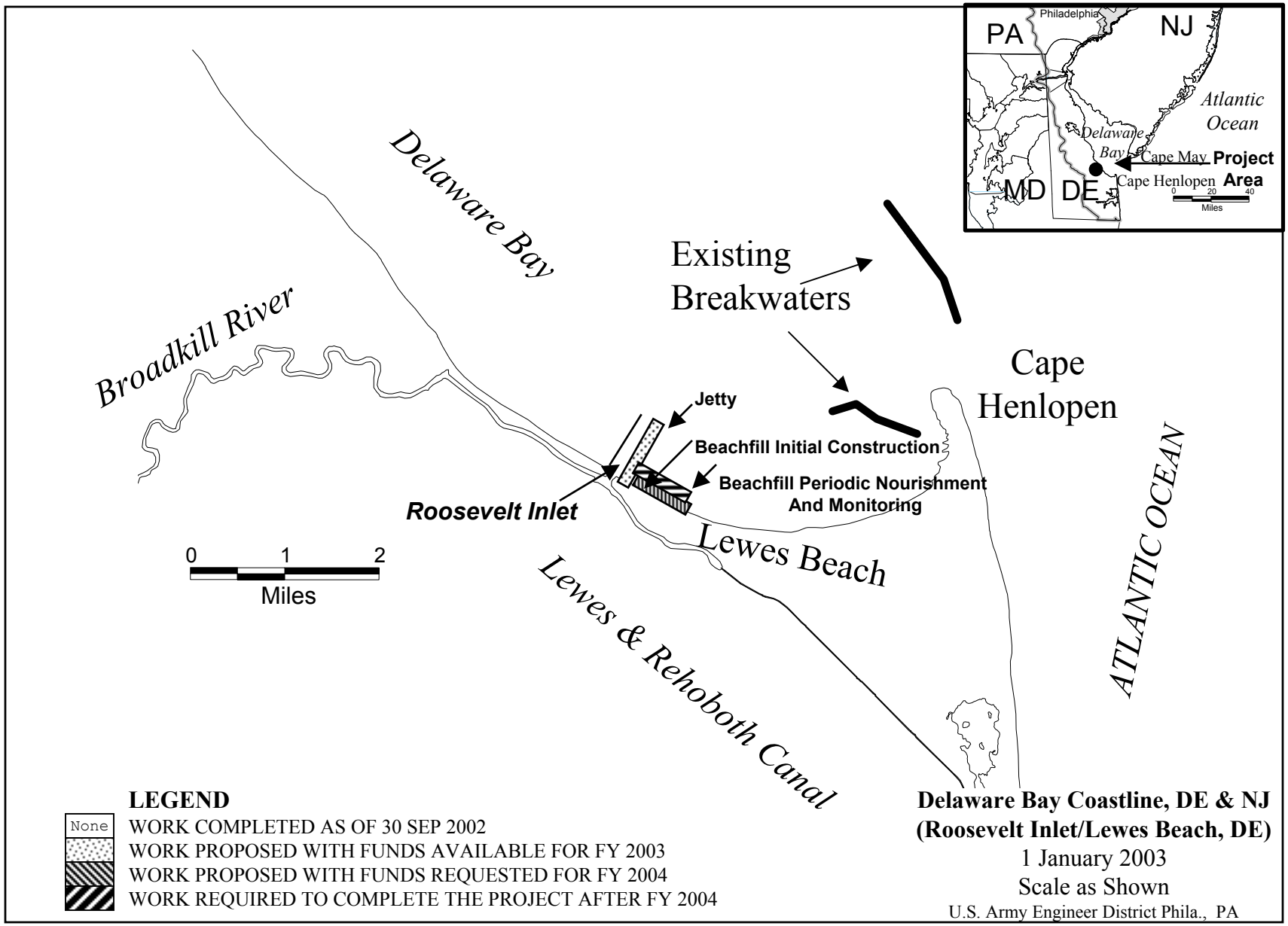
STATUS OF LOCAL COOPERATION: The Delaware Department of Natural Resources & Environmental Control (DNREC) is the non-Federal sponsor. The Project Cooperation Agreement (PCA) was executed in November 2002.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $31,400,000 is a decrease of $700,000 from the latest estimate ($32,100,000) presented to Congress (FY 2003). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	-$700,000
Total	-$700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in May 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Funds to initiate construction were appropriated in FY 2002. The Administration is considering proposing changes to the cost share for shore protection projects.


Philadelphia
PA
NJ
Atlantic Ocean
Delaware Bay
Cape May
Project Area
Cape Henlopen
MD
DE
0 20 40
Miles
Delaware Bay
Existing Breakwaters
Broadkill River
Cape Henlopen
Jetty
Beachfill Initial Construction
Beachfill Periodic Nourishment And Monitoring
Roosevelt Inlet
Lewes Beach
ATLANTIC OCEAN
Lewes & Rehoboth Canal
0 1 2
Miles
LEGEND
None
WORK COMPLETED AS OF 30 SEP 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004
Delaware Bay Coastline, DE & NJ
(Roosevelt Inlet/Lewes Beach, DE)
1 January 2003
Scale as Shown
U.S. Army Engineer District Phila., PA

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Delaware Coast Protection, Delaware (Continuing)

LOCATION: The project is located in Sussex County, Delaware, on the Atlantic Ocean at Indian River Inlet.

DESCRIPTION: The plan of improvement consists of constructing a sand bypassing plant and periodic nourishment of a feeder beach at Indian River Inlet. All work is programmed.

AUTHORIZATION: Flood Control Act of 1968 and the Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because initial construction is complete.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction is complete.

INITIAL BENEFIT - COST RATIO: 2.0 to 1 at 6 1/8 percent (FY 1977).

BASIS OF BENEFIT-COST RATIO: Atlantic Coast of Delaware General Design Memorandum, approved January 1986 at October 1984 price levels and a Reevaluation Report approved February 1984 at October 1983 price levels.

SUMMARIZED FINANCIAL DATA			
Estimated Federal Cost			$13,400,000
Initial Construction	2,266,000		
Periodic Nourishment	11,134,000		
Estimated non-Federal Cost			15,700,000
Initial Construction		441,000	
Cash Contributions	441,000		
Other Costs	0		
Periodic Nourishment	15,259,000		
Cash Contributions	0		
Other Costs	15,259,000		
Total Estimated Project Cost			29,100,000
Initial Construction		2,707,000	
Periodic Nourishment		26,393,000	

STATUS: (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Initial Construction	100	Jan 1990
Periodic Nourishment	40	TBD
Entire Project	49	TBD

PHYSICAL DATA:
Project Area Length: 3,500 feet sand bypass plant designed to provide the necessary volume of sand to the feeder beach. Feeder beach requires bypassing an average of 100,000 cubic yards each year.

Division: North Atlantic District: Philadelphia Delaware Coast Protection, DE

SUMMARIZED FINANCIAL DATA (Continued):		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2002	5,950,000	
Conference Allowance for FY 2003	TBD	
Allocation for FY 2003	TBD	
Allocations through FY 2003	TBD	
Allocation Requested for FY 2004	285,000	
Programmed Balance to Complete after FY 2004	TBD	
Unprogrammed Balance to Complete after FY 2004	0	

JUSTIFICATION: The reach of shoreline immediately north of Indian River Inlet, commonly referred to as the feeder beach, is being damaged by erosion, and State Highway Route 1 is threatened. The project area has also experienced considerable erosion from waves due to hurricanes and northeasters as a result of the lack of adequate protective beaches. The critical length of shoreline north of Indian River Inlet along which erosion threatens Route 1 is extremely important because it provides the only direct roadway between Bethany Beach and the northern beaches. There would be severe negative social and economic impacts if Route 1 were to be cut by a washover. The authorized project would provide tangible benefits by providing beach erosion control measures which in turn reduce annual beach erosion maintenance costs and reduce wave damages from coastal storms. The average annual benefits, are $9,549,20 based on 1 October 1984 price levels of which $9,121,100 is for prevention of erosion damages and $428,100 are for prevention of loss of land.

FISCAL YEAR 2004: The requested funding will be used to provide periodic nourishment through the operation of a sand bypass plant. The funds will be applied as follows:

Periodic Nourishment	$247,000
Planning, Engineering and Design	$ 27,000
Construction Management	$ 11,000
Total	$285,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal Sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Bear all costs of operation, maintenance and replacement of shoreline protection features.		$120,000
Bear 35 percent of cost allocated to periodic Nourishment.	15,700,000	
Bear 100 percent of operation, maintenance, and replacement for mitigation of shore damages attributable to navigation projects.		$203,000
Total non-Federal Costs	$15,700,000	$323,000

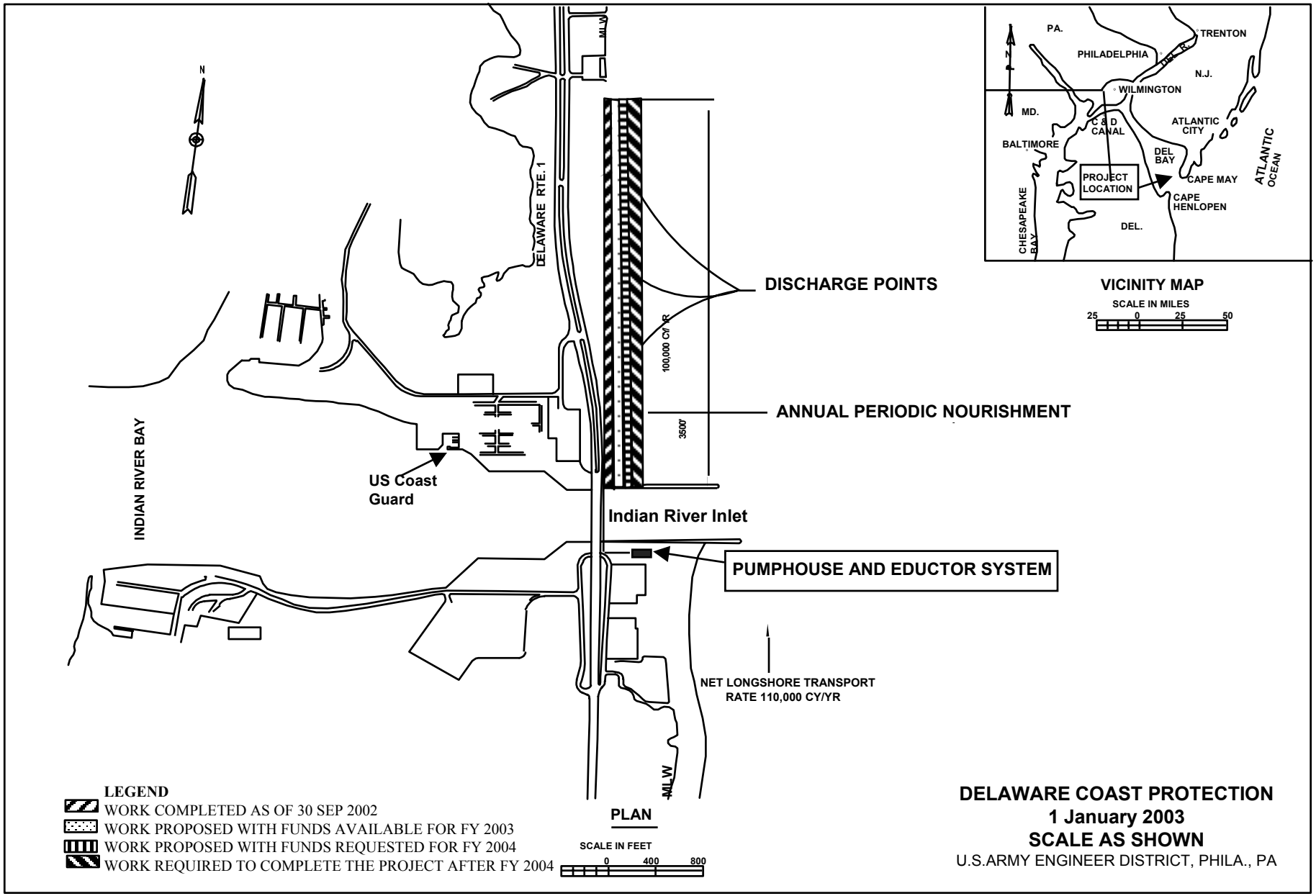
STATUS OF LOCAL COOPERATION: A Local Cooperation Agreement was executed in October 1988 with the State of Delaware. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $13,400,000 is a decrease of $2,900,000 from the latest estimate ($16,300,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	-$2,900,000
Total	-$2,900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (FEIS) was filed with the Council on Environmental Quality on 1 June 1971. A draft supplement to the FEIS was filed on 18 April 1975. An Environmental Assessment and a Finding of No Significant Impact were completed on 26 November 1984. Listing of Piping Plover (Charadrius Melodus) as an endangered bird species in January 1986 and recent determination by State wildlife officials that the species nests in the project area has necessitated review procedures in accordance with Section 7 of the Endangered Species Act of 1973. A letter from U.S. Fish and Wildlife Service, dated 4 May 1987, expressed that the project operations would cause no impact, provided an operational window is observed. Coordination with the Service is continuing.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1971, and funds to initiate construction were appropriated in FY 1977. Section 869 of the Water Resources Development Act of 1986 deauthorized the unprogrammed portion of the project. The Administration is considering proposing changes to the cost share for shore protection projects.


N
MLW
DELAWARE RTE.1
DISCHARGE POINTS
100,000 CY/YR
ANNUAL PERIODIC NOURISHMENT
3500'
INDIAN RIVER BAY
US Coast Guard
Indian River Inlet
PUMPHOUSE AND EDUCTOR SYSTEM
NET LONGSHORE TRANSPORT RATE 110,000 CY/YR
MLW
PLAN
SCALE IN FEET
0 400 800
LEGEND
WORK COMPLETED AS OF 30 SEP 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004
PA.
TRENTON
PHILADELPHIA
N.J.
WILMINGTON
MD.
C & D CANAL
ATLANTIC CITY
BALTIMORE
DEL BAY
PROJECT LOCATION
CAPE MAY
ATLANTIC OCEAN
CAPE HENLOPEN
CHESAPEAKE BAY
DEL.
VICINITY MAP
SCALE IN MILES
25 0 25 50
DELAWARE COAST PROTECTION
1 January 2003
SCALE AS SHOWN
U.S.ARMY ENGINEER DISTRICT, PHILA., PA

APPROPRIATION TITLE: Construction, General – Beach Erosion Control

PROJECT: Delaware Coast, Rehoboth Beach to Dewey Beach, DE (Continuing)

LOCATION: The Rehoboth Beach to Dewey Beach project area stretches for approximately 2 miles along the northern part of the Atlantic Ocean coast of Delaware in Sussex County, Delaware. From north to south the project area includes the City of Rehoboth Beach, the unincorporated region in front of Silver Lake (under Sussex County jurisdiction), and the Town of Dewey Beach.

DESCRIPTION: The recommended project consists of providing 1.4 million cubic yards of initial beachfill, with subsequent nourishment of 360,000 cubic yards every three years. Berm widths will be 125 and 150 feet at an elevation of +8.0 feet NGVD for Rehoboth Beach and Dewey Beach respectively, with a dune at an elevation of +14.0 feet NGVD. The project length is 13,500 feet.

AUTHORIZATION: Water Resources Development Act of 1996 and Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 6 1/8 percent based on the Limited Reevaluation Report (LRR) dated July 2002.

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 6 1/8 percent based on the LRR dated July 2002.

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 6 1/8 percent (FY 2002) based on the LRR dated July 2002.

BASIS OF BENEFIT-COST RATIO: Benefits (October 2001 price level) are from the Limited Reevaluation Report dated July 2002.

SUMMARIZED FINANCIAL DATA		
Estimated Federal Cost		$110,000,000
Initial Construction	10,335,000	
Periodic Nourishment	99,665,000	
Estimated non-Federal Cost		$ 60,000,000
Initial Construction	5,606,000	
Cash Contributions	2,114,000	
Other Costs	3,492,000	
Periodic Nourishment	54,394,000	
Cash Contributions	54,394,000	
Other Costs	0	
Total Estimated Project Cost		$170,000,000
Initial Construction	15,941,000	
Periodic Nourishment	154,059,000	

Allocations to 30 September 2002	787,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocations through FY 2003	TBD
Allocations Requested for FY 2004	5,768,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2003	0

STATUS: (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Initial Beachfill	0	Sep 2004
Periodic Nourishment	0	TBD
Entire Project	0	TBD

PHYSICAL DATA:

Beachfill: Rehoboth Beach-125 foot wide berm at an elevation of +8 feet NGVD and dune at an elevation of +14 feet NGVD: Dewey Beach-150 foot wide berm at an elevation of +8 feet NGVD and dune at an elevation of +14 feet NGVD: Dune grass, dune fence. Periodic Nourishment: every 3 years with a placement of approx. 277,000 cubic yards of material.

ACCUMULATED PCT OF EST. FED. COST

JUSTIFICATION: The project area has been subject to major flooding, erosion and wave attack during storms, causing damage to structures, and, since 1992, twice resulting in the Rehoboth Beach/Dewey Beach area being declared a National Disaster Area. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, including the virtual destruction of the existing dune system, which has increased the potential for storm damage. Storms of record that have caused significant damage occurred in August 1933, September 1944, and March 1962. Damages to 544 residences and 50 businesses, at an estimated cost of $4 million, resulting from the March 1962 storm. In addition, winter northeasters often buffet the coastline resulting in erosion and associated losses. The most notable of these occurred in December 1974, October 1977, March 1984, March 1989, October 1991, January 1992, December 1992, and January 1996. Average annual benefits are $4,006,000 (October 2001 price level).

Division: North Atlantic District: Philadelphia Delaware Coast, Rehoboth Beach to Dewey Beach, DE

FISCAL YEAR 2004: The requested amount will be applied as follows:

Complete initial beachfill	$ 5,568,000
Construction Management	$ 200,000
Total	$ 5,768,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way	$ 1,300,000	$ 66,000
Relocation utilities, roads, bridges and other facilities, where necessary for the construction of the project.	$ 2,192,000	
Pay 35 percent of the initial costs allocated to hurricane and storm damage reduction & 35% of the cost of periodic nourishment.	$ 56,508,000	
Total Non-Federal Costs	$ 60,000,000	$ 66,000

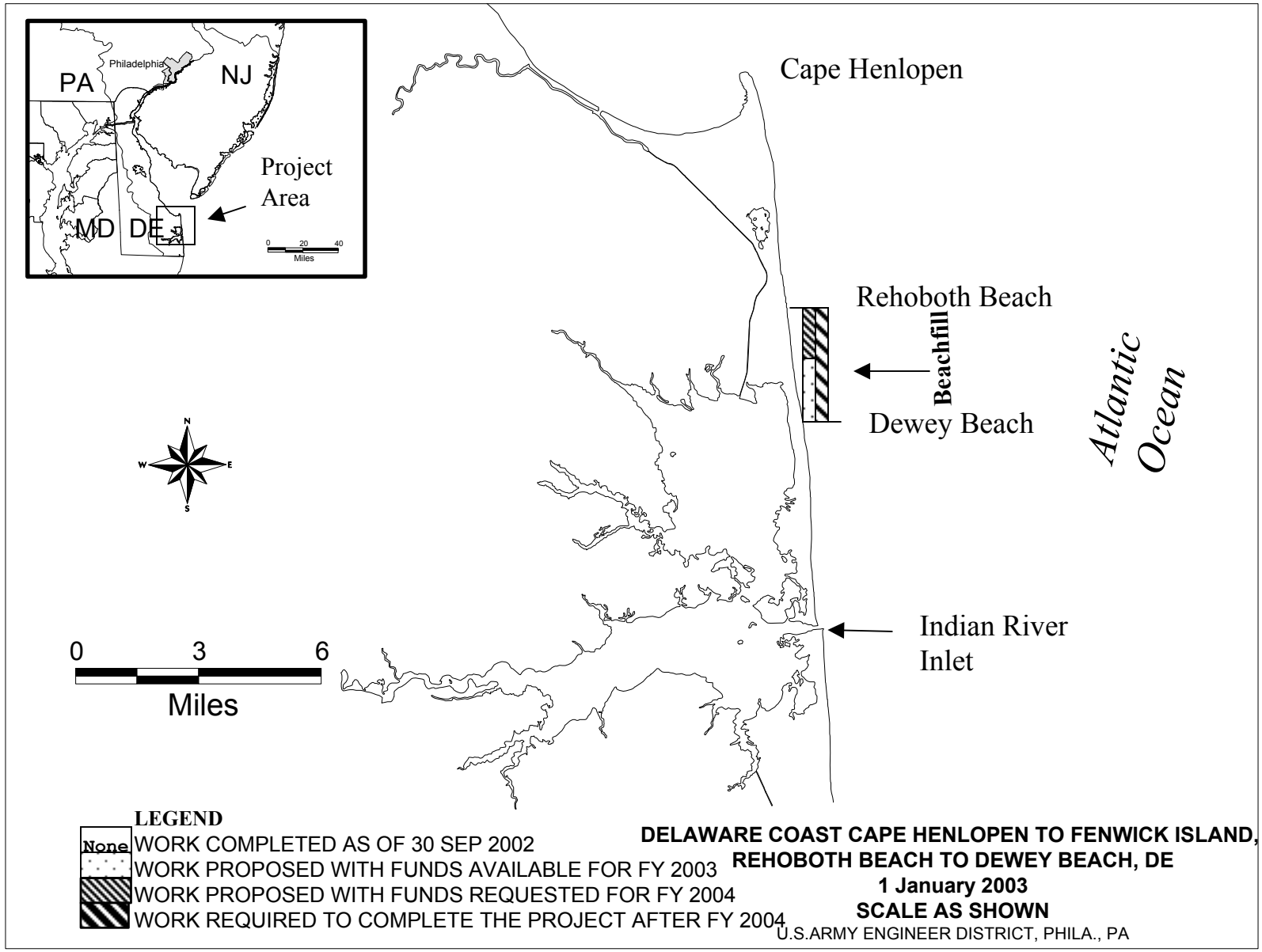
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of Delaware. A Project Cooperation Agreement with the State of Delaware is anticipated to be executed in May 2003.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $110,000,000 is an increase of $1,000,000 from the latest estimate ($109,000,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 1,000,000
Total	$ 1,000,000

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1998. Funds to initiate construction were appropriated in FY 2000. The Administration is considering proposing changes to the cost share for shore protection projects.

Division: North Atlantic District: Philadelphia Delaware Coast, Rehoboth Beach to Dewey Beach, DE



DELAWARE COAST CAPE HENLOPEN TO FENWICK ISLAND,
REHOBOTH BEACH TO DEWEY BEACH, DE
1 January 2003
SCALE AS SHOWN
U.S.ARMY ENGINEER DISTRICT, PHILA., PA

APPROPRIATION TITLE: Construction, General – Beach Erosion Control

PROJECT: Assateague Island, Maryland (Continuing)

LOCATION: The Town of Ocean City and adjacent areas of Worcester County comprise an area of 625 square miles including Assateague Island, Ocean City Inlet, and Chincoteague, Sinepuxent, Assawoman, and Isle of Wight Bays on the eastern shore of Maryland. Adjacent to Ocean City is the Assateague Island National Seashore and Assateague Island State Park.

DESCRIPTION: The project involves the short-term and long-term restoration of Assateague Island. Short-term work includes dredging of about 1.8 million cubic yards from Great Gull Bank and placing it on the Island in the area between 1.6 miles and 7.2 miles south of the jetty. Long-term work includes mobile bypassing of 185,000 cubic yards of sand annually. The project area is composed of 4.7 miles of National Park Service and 0.9 miles of State of Maryland land.

AUTHORIZATION: Water Resources Development Act of 1996

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (COE)	38,450,000				
Estimated Appropriation Requirement (OFA)	25,250,000		Initial construction (short-term)	100	Dec 2002
Total Estimated Construction Cost	$63,700,000 1/				
Allocations to 30 September 2002	6,151,000		Long-term	0	TBD
Conference Allowance for FY 2003	TBD				
Allocation for FY 2003	TBD		PHYSICAL DATA:		
Allocations through FY 2003	TBD		Environmental Restoration		
Allocation Requested for FY 2004	1,003,000		Assateague Island – 5.6 miles x 95 foot width		
Programmed Balance to Complete after FY 2004	TBD				
Unprogrammed balance to Complete after FY 2004	TBD				

1/ Section 534 of the Water Resources Development Act of 1996 authorized $35 million to be appropriated.

Division: North Atlantic District: Baltimore Assateague Island, MD

JUSTIFICATION: Existing Federal, state and local projects combined with development and agriculture have caused extensive degradation to the Ocean City and vicinity environment, particularly the coastal bays. It is estimated that nearly 2000 acres of tidal wetland habitat, and thousands of acres of non-tidal wetland habitat have been lost in the coastal bay watershed. Construction of Corps navigation channels through the inlet, harbor and back bays have contributed to the degradation of approximately 265 acres of benthic habitat. Construction of the jetties by the Corps of Engineers in 1934 to stabilize the Ocean City Inlet interrupted the natural longshore transport of sand from Ocean City to Assateague, starving the northern end of Assateague Island. The northern 1.5-7 miles of Assateague has eroded at an accelerated rate since 1933. It is estimated that the induced erosion rate for this section of the island was 10.8 feet per year. The island is now at severe risk of breaching which would change the dynamics of the area resulting in adverse physical, biological, and economic impacts in the area and threaten the habitat of several endangered species such as the piping plover.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Dredging/restoration at Assateague Island	$508,000
Planning, Engineering and Design	423,000
Construction Management	72,000
Total	$1,003,000

NON-FEDERAL COSTS: None.

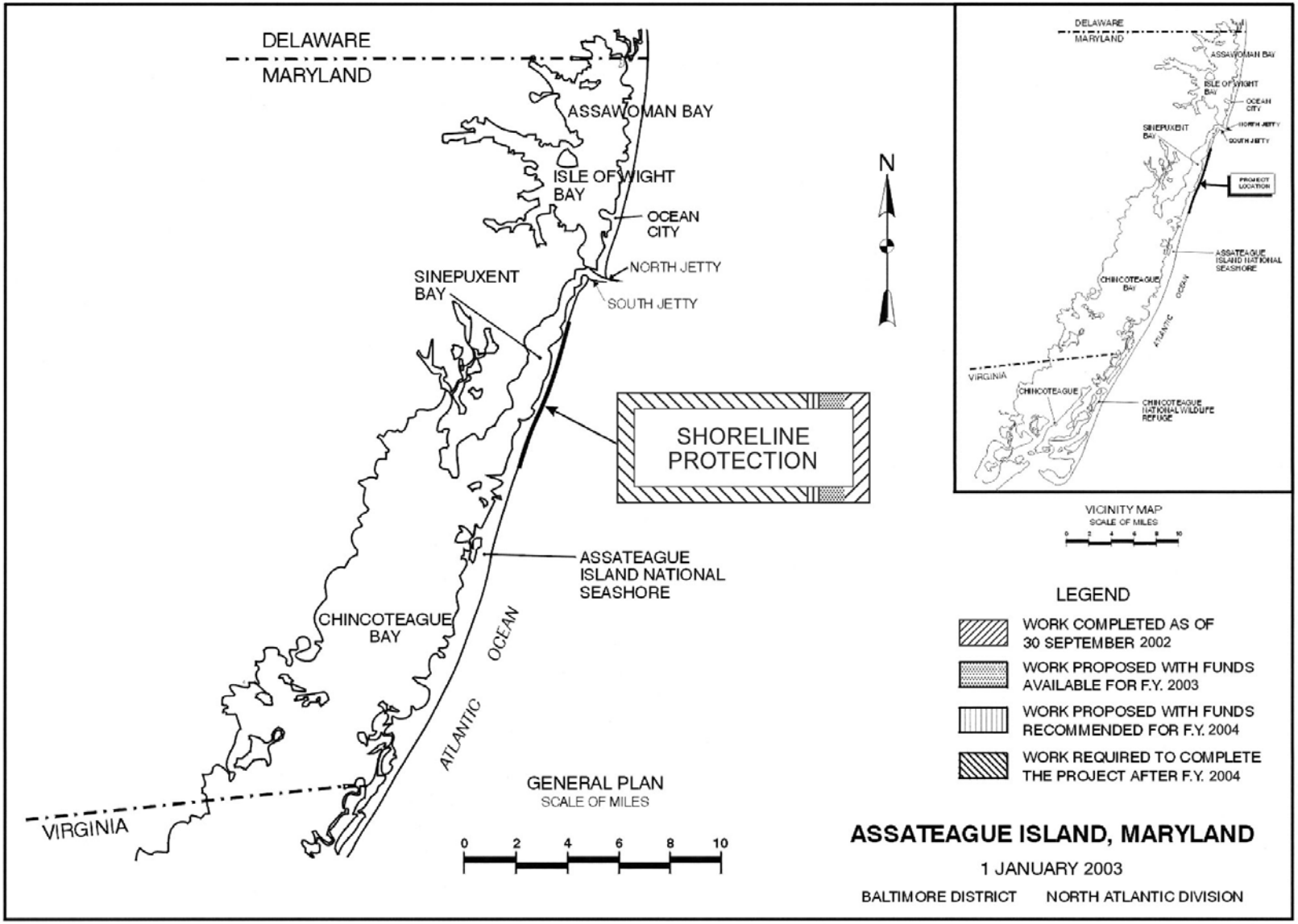
STATUS OF LOCAL COOPERATION: The sponsor for the project is the National Park Service who administers the Assateague Island National Seashore. The National Park Service is providing lands, easements and rights-of-way for the initial construction work and will cost share 50% of the long-term work. An agreement between the Park Service and the Corps was executed in September 2001. The project is strongly supported by the State of Maryland, Worcester County, and the Town of Ocean City.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $38,450,000 is the same as the latest estimate ($38,450,000) presented to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A draft Environmental Impact Statement was incorporated in the draft Integrated Interim Report dated May 1997. The final Environmental Impact Statement was incorporated in the final feasibility report completed in June 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001. The current appropriation limit of $35 million will not allow for completion of the long term work.

Due to two severe storms in January/February 1998, the Corps performed emergency work at Assateague Island in September 1998 to correct an erosion problem that threatened to breach the Island. Work involved placement of about 150,000 cubic yards of sand at a total cost of $2.1 million.


DELAWARE
MARYLAND
ASSAWOMAN BAY
ISLE OF WIGHT BAY
OCEAN CITY
NORTH JETTY
SOUTH JETTY
SINEPUXENT BAY
SHORELINE PROTECTION
ASSATEAGUE ISLAND NATIONAL SEASHORE
CHINCOTEAGUE BAY
ATLANTIC OCEAN
VIRGINIA
N
GENERAL PLAN
SCALE OF MILES
0 2 4 6 8 10
VICINITY MAP
SCALE OF MILES
LEGEND
WORK COMPLETED AS OF 30 SEPTEMBER 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR F.Y. 2003
WORK PROPOSED WITH FUNDS RECOMMENDED FOR F.Y. 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2004
ASSATEAGUE ISLAND, MARYLAND
1 JANUARY 2003
BALTIMORE DISTRICT NORTH ATLANTIC DIVISION

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Atlantic Coast of Maryland (Continuing)

LOCATION: Fenwick and Assateague Islands form the Atlantic Coast of Maryland and extend in a north-south direction from Delaware Bay to Chincoteague Inlet, Virginia. The project is located in Worcester County, Maryland.

DESCRIPTION: The project includes a dune beginning at 27th Street extending north to the Delaware line, a steel sheet pile bulkhead from 27th Street south to Fourth Street, a widened and raised beach from Third Street to just beyond the Delaware line, and periodic nourishment over the 50-year project life. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 modified by the Energy and Water Development Appropriations Act of 1990.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because initial construction is complete.

TOTAL BENEFIT - COST RATIO: Not applicable because initial construction is complete.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Design Memorandum completed in October 1989 at October 1989 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETE SCHEDULE
Estimated Federal Cost	$270,300,000				
Initial Construction	$ 29,172,000		Initial Construction	100	Dec 1994
Periodic Nourishment	241,128,000		Periodic Nourishment	15	TBD
			Entire Project	25	TBD

SUMMARIZED FINANCIAL DATA: (CONT'D)

Estimated Non-Federal Cost		229,700,000	
Initial Construction		15,709,000	
Cash Contributions	$15,175,000		
Other Costs	534,000		
Periodic Nourishment		213,991,000	
Cash Contributions	213,991,000		
Other Costs	0		
Total Estimated Project Cost		$500,000,000	
Initial Construction		44,881,000	
Periodic Nourishment		455,119,000	
Allocations to 30 September 2002		37,951,000	
Conference Allowance for FY 2003		TBD	
Allocation for FY 2003		TBD	
Allocations through FY 2003		TBD	
Allocation Requested for FY 2004		500,000	
Programmed Balance to Complete after FY 2004		TBD	
Unprogrammed Balance to Complete after FY 2004		TBD	

PHYSICAL DATA

Steel Bulkhead	- 1.5 miles
Sand Dune	- 6.7 miles
Beach	- 1.5 miles x 165 feet wide
	- 6.7 miles x 100 feet wide
	- 0.3 mile transition into Delaware

JUSTIFICATION: Fenwick Island (Ocean City, MD) is highly developed since it is the primary ocean resort for the metropolitan centers of Washington, DC and Baltimore, MD. The Ocean City portion of the shore with its highly developed recreation facilities contributes greatly to the economy of the State and to a lesser extent the nation. The current value of development in Ocean City is over $2 billion. Major portions of Ocean City's beaches have been subjected to erosion which has averaged about 2 feet per year over the past 130 years. This reach of shoreline is subject to severe damage from high tides and wave attack during major storms such as occurred in the hurricane of August 1993 and in the northeast storm of March 1962, with estimated damages of $76.1 million. Since 1962, significant development has occurred in the damage prone area. Damages to the public and private property at Ocean City from Hurricane Gloria in September 1985 were estimated at $11.9 million. Severe beach erosion was also caused by the remnants of Hurricane Juan in November 1985 with damages estimated at $944,000. On 30 and 31 October 1991, and 9 and 10 November 1991, Atlantic storms hit the northeast coast; however, only minor damage occurred at Ocean City as a result of the essentially completed project. Damages prevented by the project were estimated at about $32 million. On 4 and 5 January 1992 a more devastating storm hit Ocean City causing about $300,000 in property damages. Damages prevented by the project during that storm were estimated at $61 million. The average annual benefits, essentially all storm damage reduction, are $13,712,000 based on 1 October 1989 price levels.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Planning, Engineering and Design	$500,000
Total	$500,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	$ 494,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges) and other facilities, where necessary in the construction of the project.	40,000	
Pay 35 percent of the first costs and 47 percent of the cost of periodic nourishment based on a formula that requires payment of 35 percent of the costs assigned to storm damage reduction and 100 percent of the costs assigned to recreation; and bear all costs of operation, maintenance, replacement, and major rehabilitation of storm damage reduction facilities.	229,166,000	$1,656,000
Total Non-Federal Costs	229,700,000	$1,656,000

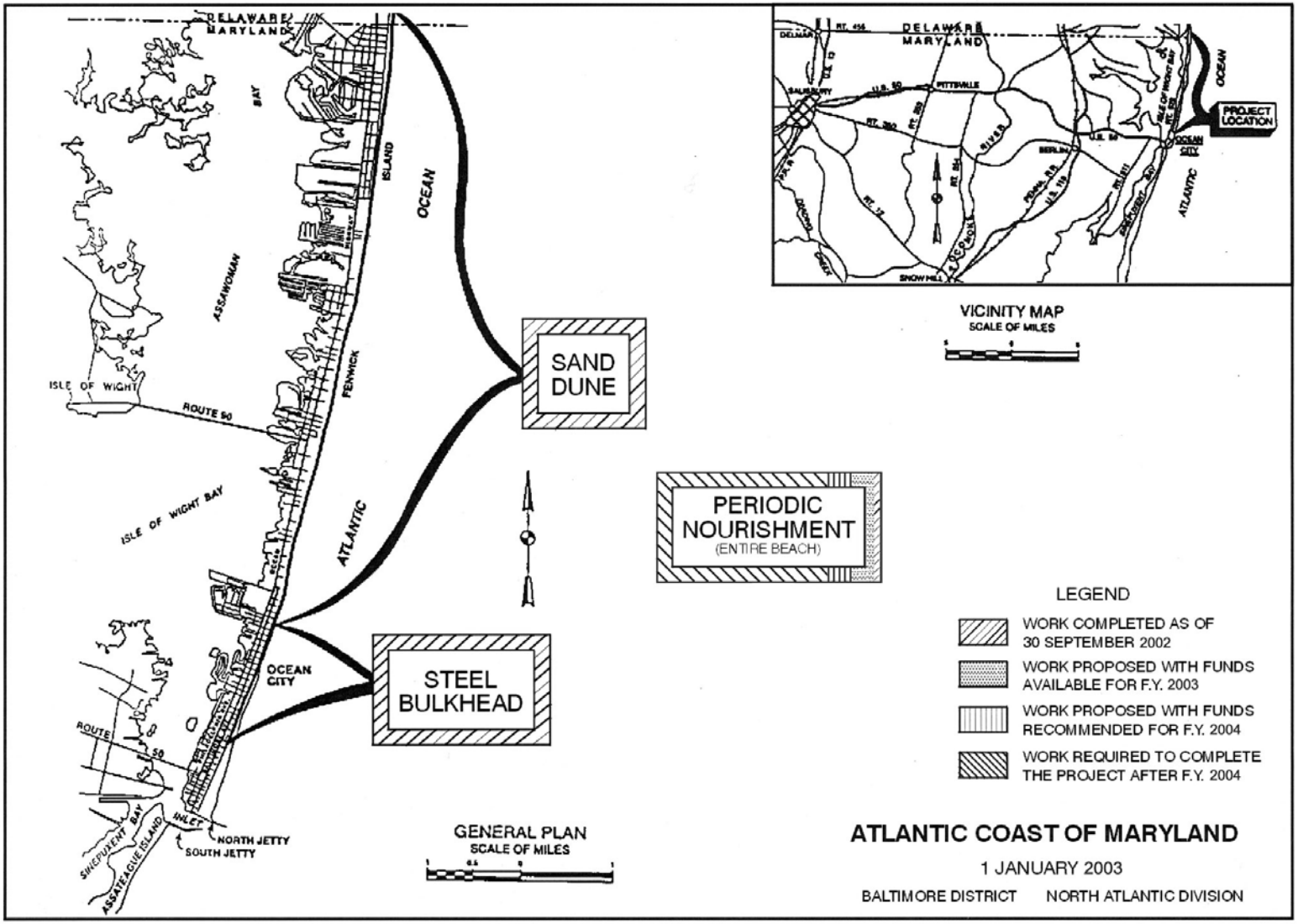
STATUS OF LOCAL COOPERATION: The State of Maryland is the local sponsor for the project. The Local Cooperation Agreement was executed in March 1990. To date, the State of Maryland has fully complied with local requirements on the project.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $270,300,000 is the same as the latest estimate ($270,300,000) presented to Congress (FY 2003)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Environmental Protection Agency in May 1981. An environmental assessment dated June 1989 is included in the final General Design Memorandum.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction were appropriated in FY 1990. The Administration is considering proposing changes to the cost share for shore protection projects.

Division: North Atlantic District: Baltimore Atlantic Coast of Maryland


DELAWARE
MARYLAND
ASSAWOMAN BAY
ISLAND
OCEAN
ATLANTIC
PENNWICK
ISLE OF WIGHT
ROUTE 90
ISLE OF WIGHT BAY
OCEAN CITY
ROUTE 50
INLET
NORTH JETTY
SOUTH JETTY
SINEPUXENT BAY
ASSATEAGUE ISLAND
SAND DUNE
STEEL BULKHEAD
PERIODIC NOURISHMENT
(ENTIRE BEACH)
GENERAL PLAN
SCALE OF MILES
VICINITY MAP
SCALE OF MILES
PROJECT LOCATION
LEGEND
WORK COMPLETED AS OF 30 SEPTEMBER 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR F.Y. 2003
WORK PROPOSED WITH FUNDS RECOMMENDED FOR F.Y. 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2004
ATLANTIC COAST OF MARYLAND
1 JANUARY 2003
BALTIMORE DISTRICT NORTH ATLANTIC DIVISION

APPROPRIATION TITLE: Construction, General – Beach Erosion Control

PROJECT: Brigantine Inlet to Great Egg Harbor Inlet, NJ (Absecon Island, NJ) (Continuing)

LOCATION: This project is located along Atlantic Coast of New Jersey, approximately 50 miles east of Philadelphia, Pennsylvania.

DESCRIPTION: The recommended project consists of providing 6.2 million cubic yards of initial beachfill, with subsequent periodic nourishment of 1.6 million cubic yards every three years, for a 200-foot-wide berm at elevation 8.5 feet NGVD and a dune to elevation 16 feet NGVD for Atlantic City, and a 100-foot-wide berm at elevation 8.5 feet NGVD and a dune to 14 feet NGVD for Ventnor, Margate and Longport along 8.1 miles of shoreline. The plan also includes 0.3 miles of bulkhead construction along the Absecon Inlet frontage of Atlantic City.

AUTHORIZATION: Section 101(b)(13) of WRDA 1996

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 71/8 percent

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 7 1/8 percent

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 7 1/8 percent (FY 2000)

BASIS OF BENEFIT-COST RATIO: Brigantine Inlet to Great Egg Harbor Inlet, Absecon Island Interim Feasibility study. The Chief Report is dated December 1996.

SUMMARIZED FINANCIAL DATA			STATUS: (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$554,000,000	Initial Beachfill	0	TBD
Initial Construction	44,702,000		Periodic Nourishment	0	TBD
Periodic Nourishment	509,298,000		Bulkhead	0	TBD
			Entire Project	0	TBD

SUMMARIZED FINANCIAL DATA: (Continued)

Estimated non-Federal Cost		$299,000,000
Initial Construction	24,071,000	
Cash Contributions	22,949,000	
Other Costs	1,122,000	
Periodic Nourishment	274,929,000	
Cash Contributions	274,929,000	
Other Costs	0	
Total Estimated Project Cost		$853,000,000
Initial Construction	68,773,000	
Periodic Nourishment	784,227,000	

PHYSICAL DATA: 200-foot-wide berm at elevation +8.5 feet NGVD and a dune to elevation +16 feet for Atlantic City, and a 100-foot-wide berm at elevation +8.5 feet NGVD and a dune to +14 feet for Ventnor, Margate and Longport along 8.1 miles of shoreline. The plan also includes 0.3 miles of bulkhead construction along the Absecon Inlet frontage of Atlantic City. Initial placement of 6.2 million cubic yards of sand. Periodic Nourishment: every 3 years with a placement of approx. 1.6 million cubic yards of material

		ACCUMULATED
		PCT OF EST.
		FED. COST
Allocations to 30 September 2002	1,654,000	
Conference Allowance for FY 2003	TBD	
Allocation for FY 2003	TBD	
Allocations through FY 2003	TBD	
Allocations Requested for FY 2004	1,000,000	
Programmed Balance to Complete after FY 2004	TBD	
Unprogrammed Balance to Complete after FY 2004	0	

JUSTIFICATION: The area has been subject to major flooding, erosion and wave attack during storms, causing damage to structures, and since 1992, was twice declared a National Disaster Area. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, which has increased the potential for storm damage. The project provides average annual benefits of $16,356,000 (October 1995 price level).

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Construction	$ 950,000
Planning, Engineering, and Design	10,000
Construction, Management	40,000
Total	1,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

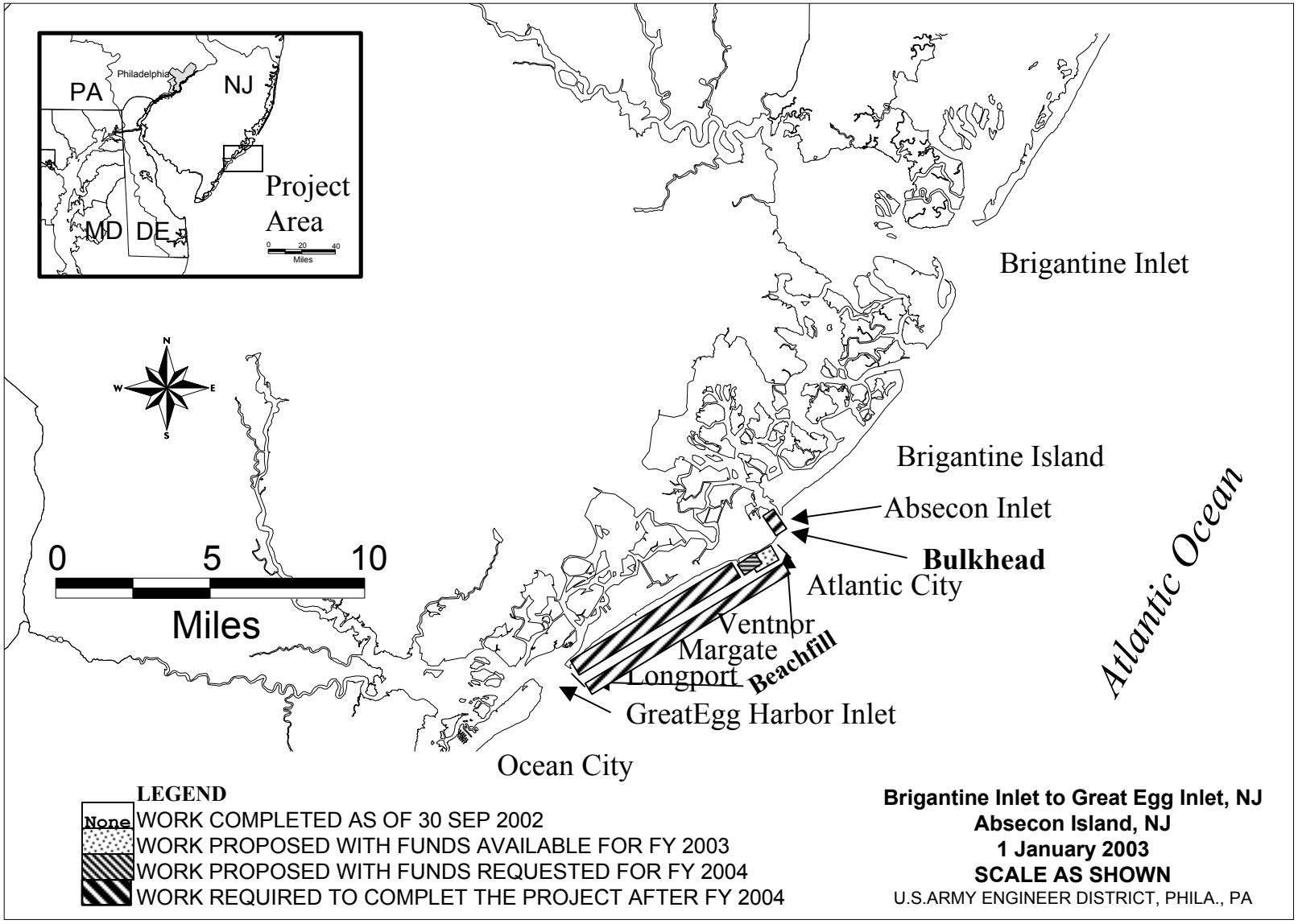
Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way	$ 137,000	
Relocation utilities, roads, bridges and Other facilities, where necessary for the Construction of the project.	1,002,000	
Pay 35 percent of the initial costs allocated to hurricane and storm damage reduction and cost of periodic nourishment and monitoring.	297,861,000	
Total Non-Federal Costs	$299,000,000	

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey Department of the Environmental Protection (NJDEP). The Project Cooperation Agreement is scheduled, to be executed, in September 2003.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $554,000,000 is an increase of $21,000,000 from the latest estimate ($533,000,000) presented to Congress (FY 2003). This change includes the following items:

Item	Incremental Change
Price Escalation on Construction Features	$ 21,000,000
Total	$ 21,000,000

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2000. The Administration is considering proposing changes to the cost share for shore protection projects.


PA
NJ
Philadelphia
MD
DE
Project Area
0 20 40
Miles
N
W
E
S
0 5 10
Miles
Brigantine Inlet
Brigantine Island
Absecon Inlet
Bulkhead
Atlantic City
Ventnor
Margate
Longport
Beachfill
GreatEgg Harbor Inlet
Ocean City
Atlantic Ocean
LEGEND
None
WORK COMPLETED AS OF 30 SEP 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
WORK REQUIRED TO COMPLET THE PROJECT AFTER FY 2004
Brigantine Inlet to Great Egg Inlet, NJ
Absecon Island, NJ
1 January 2003
SCALE AS SHOWN
U.S.ARMY ENGINEER DISTRICT, PHILA., PA

APPROPRIATION TITLE: Construction General - Beach Erosion Control

PROJECT: Cape May Inlet to Lower Township, New Jersey (Continuing)

LOCATION: The site of the recommended project is located on the Atlantic Coast of New Jersey, approximately 38 miles southwest of Atlantic City. It includes the communities of Cape May City including the United States Coast Guard Training Center and Lower Township in Cape May County.

DESCRIPTION: The plan of improvement consists of construction of two groins and placing beachfill and periodic nourishment which are programmed and the construction of a weir breakwater which is unprogrammed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction is complete.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction is complete.

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 8 5/8 percent (FY 1986).

BASIS OF BENEFIT-COST RATIO: Cape May Inlet to Lower Township, New Jersey, Benefits Reevaluation Report approved March 1988 at June 1987 price levels.

SUMMARIZED FINANCIAL DATA			STATUS: (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (COE)		95,800,000	Initial Construction	100	June 1991
Programmed Construction		88,296,000	Breakwaters	0	Indefinite 1/
Initial Construction	5,930,000		Entire Project	25	TBD
Periodic Nourishment	82,366,000				
Unprogrammed Construction		7,504,000	PHYSICAL DATA:		
Initial Construction	7,504,000		Beachfill: Elev +8 Feet (NGVD), 25-180 foot width		
Periodic Nourishment	0		Groins: 7 existing and 2 new groins, 360-786 feet		
			Weir Breakwater: 2,560 linear feet rubble mound		
			Periodic Nourishment: 180,000 cubic yards per year		

1/ Completion of the breakwater element is indefinite pending a decision to construct this feature.

SUMMARIZED FINANCIAL DATA (Continued)

Estimated Federal Cost (USCG)			$54,900,000
Programmed Construction		50,766,000	
Initial Construction	3,458,000		
Periodic Nourishment	47,308,000		
Unprogrammed Construction		4,134,000	
Initial Construction	4,134,000		
Periodic Nourishment	0		
Estimated Non-Federal Cost			10,600,000
Programmed Construction		9,766,000	
Initial Construction	656,000		
Cash Contributions	656,000		
Other Costs	0		
Periodic Nourishment	9,110,000		
Cash Contributions	9,110,000		
Other Costs	0		
Unprogrammed Construction		834,000	
Initial Construction	834,000		
Cash Contributions	834,000		
Other Costs	0		
Total Estimated Programmed Construction		148,828,000	
Initial Construction	10,044,000		
Periodic Nourishment	138,784,000		
Total Estimated Unprogrammed Construction Cost		12,472,000	
Initial Construction	12,472,000		
Periodic Nourishment	0		
Total Estimated Project Cost			$161,300,000
Initial Construction	22,516,000		
Periodic Nourishment	138,784,000		

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 2002	21,476,000	
Conference Allowance for FY 2003	TBD	
Allocation for FY 2003	TBD	
Allocations through FY 2003	TBD	
Allocations Requested for FY 2004	1,728,000	
Programmed Balance to Complete after FY 2004	TBD	
Unprogrammed Balance to Complete after FY 2004	TBD	

JUSTIFICATION: The project area has experienced substantial erosion since the construction of the Cape May Inlet jetties in 1911 by the Federal Government. The jetties interrupt the natural movement of sand along the coast which serves to replenish downdrift beach areas. The City of Cape May and State of New Jersey have spent nearly $4 million since 1945 to combat the resulting erosion. This erosion has left Cape May with little or no protective beach, thus endangering many hotels, small businesses, prominent homes, and a U.S. Coast Guard Training Center. This project would partially restore the beaches of Cape May lost as the direct result of the Cape May Inlet jetties. The potential for future storm damages and maintenance of the seawall would be greatly reduced. The commercial tourism industry would also be enhanced by the provision of sufficient beach area for recreational usage. The project prevented approximately $9 million worth of damages during the 3-5 January 1992 storm, and approximately $500,000 in damages during the 7-8 January 1996 storm.

Federal facilities have existed at the present site since the establishment of a U.S. Navy Section Base in 1918. The U.S. Coast Guard became the sole occupant in 1948 when the Recruit Training Center was transferred from Florida. In addition to being the sole site for Coast Guard recruit training for the entire nation, the site also includes a Group/Air Station complex, a Search and Rescue Station, a small boat maintenance facility, and berths for four cutters ranging from 82 to 210 feet in length. The Commandant of the U.S. Coast Guard (USCG) offered to seek funds to support a cost-shared project with the Corps of Engineers, because of the erosion at the Training Center and the need for a cooperative effort to solve the problem. The average annual benefits are $3,993,000 at June 1987 price levels. These include annual storm damage reduction benefits of $2,977,000, reduced annual maintenance costs of $160,000, and annual recreation benefits of $856,000.

Fiscal Year 2004: The requested amount will be applied as follows:

Periodic Nourishment	$1,500,000
Engineering and Design	158,000
Construction Management	70,000
Total	$1,728,000

Division: North Atlantic District: Philadelphia Cape May Inlet to Lower Township, NJ

NON-FEDERAL COST: In accordance with Section 101 of the Water Resources Development Act of 1986, costs of constructing measures for mitigation of erosion damages attributable to the Federal navigation project at Cape May Inlet shall be shared in the same proportion as the cost sharing provisions applicable to the original project at Cape May Inlet. The original project was constructed at a Federal cost of approximately $900,000 with a local contribution of $100,000. The distribution of initial costs between the USCG and Cape May City is based on the ratio of benefits accrued by the feeder beach between the two locations. Costs for the remaining features of the recommended project will be allocated to Cape May City. The non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Reimbursement Costs
Make cash contributions equal to 10 percent of the initial construction cost and 10 percent of future periodic nourishment and monitoring.	$10,600,000	
Total Non-Federal Costs	$10,600,000	$0

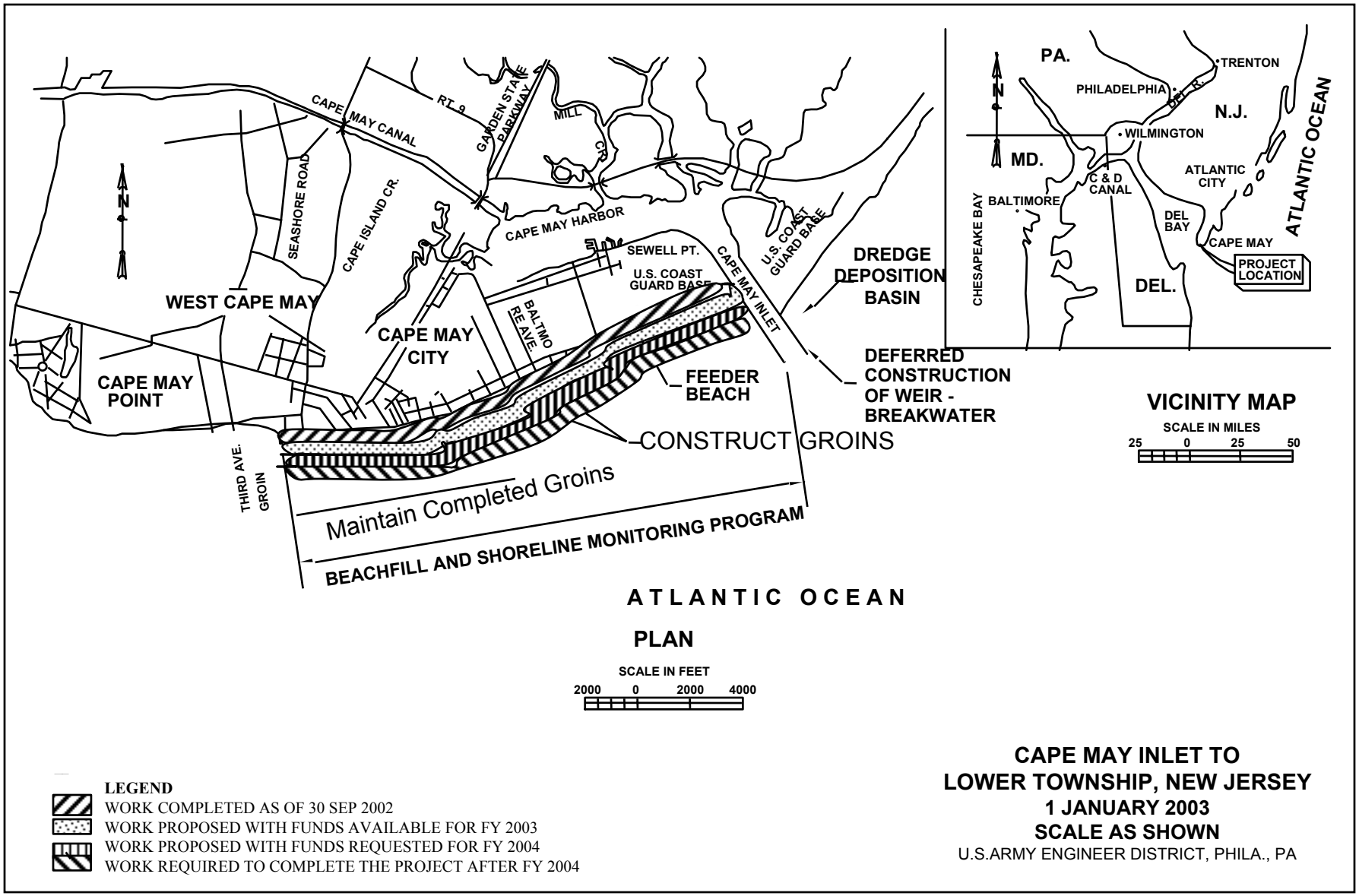
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey. A Memorandum of Agreement with the USCG was executed on 4 August 1988. A Local Cooperation Agreement with the State of New Jersey was executed on 31 October 1988.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate (Corps of Engineers) of $95,800,000 is an increase of $8,400,000 from the latest estimate ($87,400,000) presented to Congress (FY 2003). This change includes the following items:

ITEM	AMOUNT
Price Escalation on Construction Features	$ 8,400,000
Total	$ 8,400,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 8 October 1976 and a Final Supplement was filed with the Environmental Protection Agency on 14 August 1981. Listing of Piping Plover (Charadrius Melodus) as an endangered bird species in January 1986 and the recent determination by State wildlife officials that the species nests in the project area have necessitated informal consultation in accordance with Section 7 of the Endangered Species Act of 1973. A letter from U.S. Fish and Wildlife Service, dated 20 August 1987 determined that the proposed project is not likely to adversely affect the Piping Plover, provided an operational window is observed. Coordination with the Service is continuing.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1978. Funds to initiate construction were appropriated in FY 1986. Section 111 of the River and Harbor Act of 1968 is applicable to this proposed project due to the shore damages caused in Cape May City by the Federal navigation project at Cape May Inlet. The Administration is considering proposing changes to the cost share for shore protection projects.



LEGEND

- WORK COMPLETED AS OF 30 SEP 2002
- WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
- WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
- WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004

CAPE MAY INLET TO
LOWER TOWNSHIP, NEW JERSEY
1 JANUARY 2003
SCALE AS SHOWN
U.S.ARMY ENGINEER DISTRICT, PHILA., PA

APPROPRIATION TITLE: Construction, General – Beach Erosion Control

PROJECT: Great Egg Harbor Inlet and Peck Beach, New Jersey (Continuing)

LOCATION: The project is located in Cape May and Atlantic Counties, New Jersey. Great Egg Harbor Inlet, an unimproved inlet, is about 1.1 miles wide at its narrowest point and provides a tidal connection between the Atlantic Ocean and Great Egg Harbor Bay, the New Jersey Intracoastal Waterway, and Great Egg Harbor River. Peck Beach is occupied in its entirety by the City of Ocean City and extends from Great Egg Harbor Inlet southward to Corson Inlet. The ocean frontage is about eight miles in length.

DESCRIPTION: The recommended plan consists of providing initial beachfill, with subsequent periodic nourishment, with a minimum berm width of 100 feet at an elevation of 8 feet above mean low water. The beachfill extends from Surf Road southwest to 34th Street with a 1000 foot taper south of 34th Street. This plan required the initial placement of roughly 6.2 million cubic yards of material and will require periodic nourishment of about 1.1 million cubic yards every three years. The material for the initial construction, and periodic nourishment will be taken from the ebb shoal area located about 5,000 feet offshore of the Great Egg Harbor Inlet. Additionally, the construction of the project required the extension of 38 storm drainpipes. All work is programmed.

AUTHORIZATION: Committee Resolutions on 15 December 1970 under the provision of Section 201 of the River and Harbor and Flood Control Act of 1965 and the Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction is complete.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction is complete.

INITIAL BENEFIT-COST RATIO: 2.0 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: The April 1989 General Design Memorandum approved on 2 May 1990 at September 1988 price levels.

SUMMARIZED FINANCIAL DATA :

Estimated Federal Cost			444,000,000
Initial Construction	20,556,000		
Periodic Nourishment	423,444,000		
Estimated non-Federal Cost			240,000,000
Initial Construction		19,889,000	
Cash Contributions	11,151,000		
Other Costs	8,738,000		
Periodic Nourishment		220,111,000	
Cash Contributions	220,111,000		
Other Costs	0		
Total Estimated Project Cost			684,000,000
Initial Construction	40,445,000		
Periodic Nourishment	643,555,000		

Allocations to 30 September 2002	37,400,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocations through FY 2003	TBD
Allocations Requested for FY 2004	7,355,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2004	0

STATUS:(1 Jan 2003)	PHYSICAL PERCENT COMPLETE	COMPLETION SCHEDULE
Initial Beachfill (Phase I)	100	Oct 1992
Initial Beachfill (Phase II)	100	Mar 1993
Entire Project	19	TBD

PHYSICAL DATA:
Beachfill: Elevation +8 feet (NGVD); 100-Foot Width
Periodic Nourishment: 1.1 million cy every three years

ACCUMULATED PCT OF EST. FED. COST

JUSTIFICATION: The instability of Great Egg Harbor Inlet and the shoreline along Peck Beach is a significant problem. Peck Beach, a 9-mile-long barrier island along New Jersey's southern coastline contains the entire City of Ocean City. The primary problem at Ocean City is the vulnerability of the beach and the adjacent highly urbanized development to erosion and direct wave attack during major storms. Historical erosion rates for the beaches have averaged five feet per year with severe erosion rates up to 35 feet per year in some locations. In March 1962, a severe storm caused breaching and failing of bulkheads and dunes, and resulted in about $15,000,000 damages of which $4,000,000 was attributed to direct wave attack. It was noted that the area fronting the existing Federal shore protection for Ocean City sustained less damage than other locations. The storm of 28 to 30 March 1984 caused extensive damage to the beach, boardwalk, properties and buildings due to the vulnerable condition of the beaches. More recently, the storms of 30 and 31 October 1991 and 3 to 5 January 1992 caused extensive damages to the beach, boardwalk, properties and buildings. Since initial construction of the project was completed in March 1993, approximately $20,000,000 worth of damages to the area were prevented during the 3-5 January 1992 storm, $4,000,000 in damages to the boardwalk during Hurricane Felix in August 1995, and $1,000,000 during the storm of 7-8 January 1996.

Division: North Atlantic District: Philadelphia Great Egg Harbor Inlet and Peck Beach, NJ

JUSTIFICATION: (continued)
Beach erosion and loss of protective dunes have left Ocean City extremely vulnerable to inundations and direct wave attack from even minor storm events. The instability and shoaling of Great Egg Harbor Inlet also creates navigation difficulties for commercial and recreation craft, particularly those associated with low tides and ground swells and damages due to running aground. Unsafe navigation conditions due to excessive shoals at Great Egg Harbor Inlet required the State of New Jersey to commence emergency dredging operations in October 1989.

FISCAL YEAR 2004: The requested funding will be used to complete the 4th cycle of periodic nourishment. The funds will be applied as follows:

Periodic Nourishment	$6,501,000
Planning, Engineering, and Design	284,000
Construction Management	570,000
Total	$7,355,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	$ 8,738,000	
Pay 35 percent of the all costs allocated to hurricane and storm damage reduction and all costs of operation and maintenance of shoreline protection structures and outfalls.	231,262,000	$ 36,000
Total Non-Federal Costs	$ 240,000,000	$ 36,000

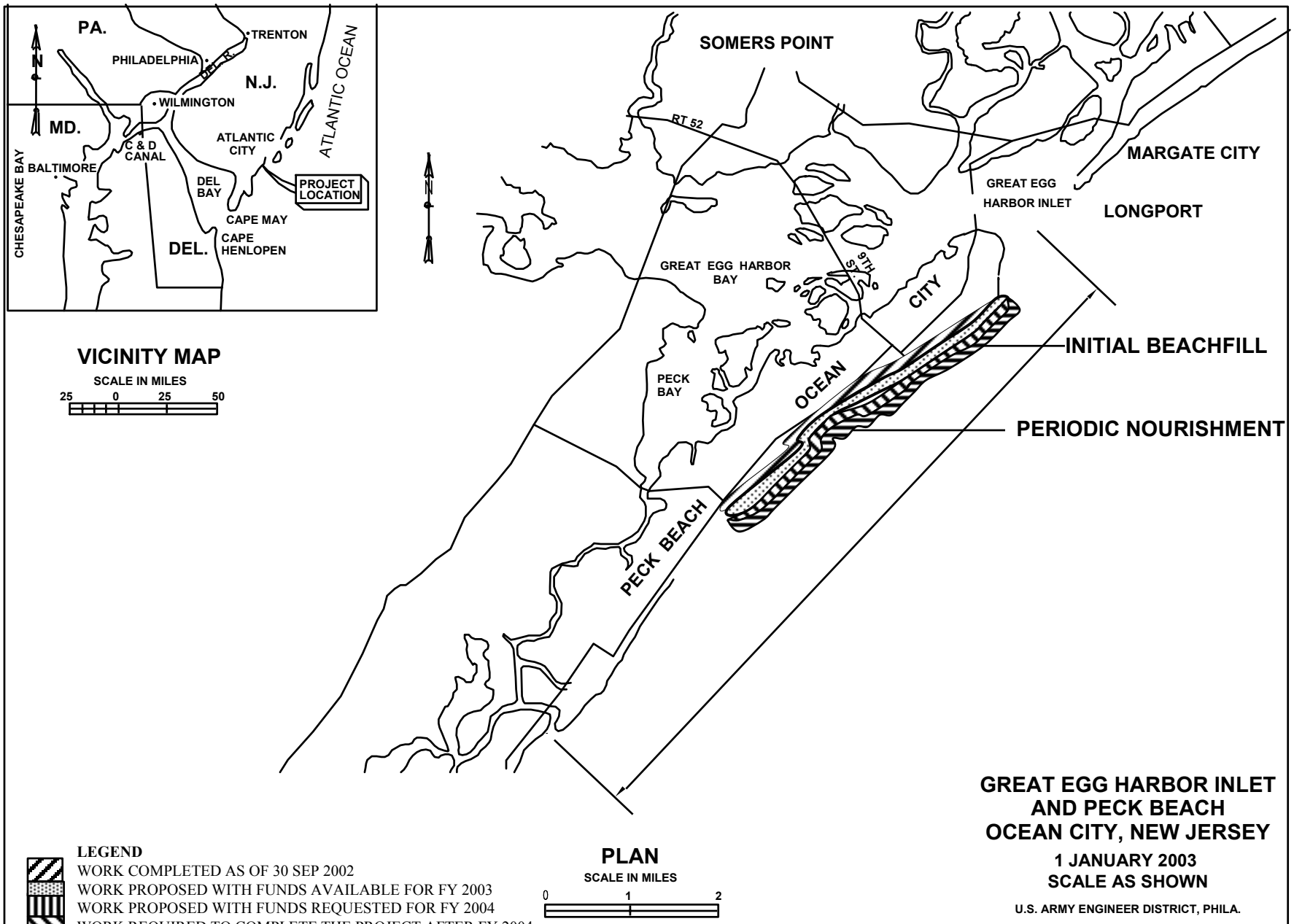
STATUS OF LOCAL COOPERATION: The state of New Jersey is the non-Federal sponsor for the project. In a letter dated 28 September 1990, the state identified a funding source for the non-Federal costs and indicated that it was prepared to proceed with the final negotiations to sign the Local Cooperation Agreement. The state's financing plan was provided by letter dated 28 February 1991. The local cooperation agreement was executed in September 1991.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $444,000,000 is an increase of $6,000,000 from the latest estimate ($438,000,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 6,000,000
Total	$ 6,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 13 November 1970 and a Final Supplemental Environmental Impact Statement (FSEIS) was filed with the Environmental Protection Agency (EPA) in August 1990. The Piping Plover (Charadrius melodus) was listed as an endangered bird species in January 1986 and a determination that the species nests in the project area necessitated informal consultation in accordance with Section 7 of the Endangered Species Act of 1973. A letter from the US Fish and Wildlife Service, dated 9 January 1989 directed the Corps to minimize impacts to the Piping Plover in the project area. A detailed plan to protect the Piping Plover was included in the FSEIS. On 31 August 1990, the Advisory Council on Historic Preservation informed the District that it did not concur with the Finding of No Effect issued by the New Jersey State Historic Preservation Office on 12 April 1989. A process Memorandum of Agreement to address cultural resources concerns relating to project effects on the shipwreck Sindia was executed on 4 April 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1973. Funds to initiate construction were appropriated in FY 1990. The Administration is considering proposing changes to the cost share for shore protection projects.


PA.
TRENTON
PHILADELPHIA
DEL. R.
N.J.
WILMINGTON
MD.
ATLANTIC OCEAN
C & D CANAL
ATLANTIC CITY
CHESAPEAKE BAY
BALTIMORE
DEL BAY
PROJECT LOCATION
CAPE MAY
CAPE HENLOPEN
DEL.
VICINITY MAP
SCALE IN MILES
25 0 25 50
SOMERS POINT
RT 52
MARGATE CITY
GREAT EGG HARBOR INLET
LONGPORT
GREAT EGG HARBOR BAY
9TH ST.
CITY
INITIAL BEACHFILL
PECK BAY
OCEAN
PERIODIC NOURISHMENT
PECK BEACH
PLAN
SCALE IN MILES
0 1 2
LEGEND
WORK COMPLETED AS OF 30 SEP 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004
GREAT EGG HARBOR INLET
AND PECK BEACH
OCEAN CITY, NEW JERSEY
1 JANUARY 2003
SCALE AS SHOWN
U.S. ARMY ENGINEER DISTRICT, PHILA.

APPROPRIATION TITLE: Construction, General – Navigation Mitigation, Ecosystem Restoration, Hurricane and Storm Damage Reduction

PROJECT: Lower Cape May Meadows, Cape May Point, NJ (Continuing)

LOCATION: Project area includes Lower Cape May Meadows and the Borough of Cape May Point and extends some 2 miles along the southern Atlantic coast of New Jersey.

DESCRIPTION: The plan consists of a dune/berm 20 feet wide extending for a total length of 10,050 feet; planting of 18 acres of dune vegetation; seaward restoration of 35 acres of emergent wetland; elimination of 95 cares of the nuisance plant Phragmites australis; planting of 105 acres of wetland vegetation; creation of drainage ditches; installation of two weir-flow control structures; creation of six fish reservoirs ; and construction of elements to create 25 acres of tidal marsh. The project also includes 650,00 cubic yards of periodic nourishment every 4 years over the 50-year project life, and monitoring and adaptive management over a 5-year period for the Lower Cape May Meadows freshwater wetlands restoration element.

AUTHORIZATION: Section 101 (a) (25) of WRDA 1999.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

INITIAL BENEFIT-COST RATIO: Not applicable

BASIS OF BENEFIT-COST RATIO: Benefits and costs (October 1998 price level) are based on the Chief of Engineers Report dated 05 April 1999.

SUMMARIZED FINANCIAL DATA:		ACCUM. PCT. OF EST. FED COST
Estimated Federal Cost		152,000,000
Initial Construction	$ 13,854,300	
Periodic Nourishment	$138,145,700	
Estimated Non-Federal Cost		39,000,000
Cash Contribution	38,826,000	
Other	$ 174,000	
Total Estimated Project Cost		191,000,000
Allocations to 30 September 2002		788,000
Conference Allowance for FY 2003		TBD
Allocation for FY 2003		TBD
Allocations through FY 2003		TBD
Allocation Requested for FY 2004		1,841,000
Programmed Balance to Complete after FY 2004		TBD
Unprogrammed Balance to Complete after FY 2004		0

STATUS: (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Initial Beachfill	0	TBD
Fish & Wildlife	0	TBD
Entire Project	0	TBD

PHYSICAL DATA

Dune/berm: 20 feet wide; total length 10,050 ft

Plantings: 158 acres of dune, emergent wetland and wetland.

Creation of Weir-flow Control Structures and fish reservoirs

New tidal marsh: 25 acres

Monitoring and adaptive management: 5 years

Periodic Nourishment: 4 year cycle for 50 years with monitoring

JUSTIFICATION: Lower Cape May Meadows has been severely impacted by shoreline erosion linked to the Federal navigation project at Cape May Inlet completed in 1911. Erosion has resulted in the direct loss of beach and unique freshwater wetland habitat. Erosion to the dune system has left the remaining freshwater ecosystem in The Meadows substantially degraded through saltwater intrusion and subsequent topographical alteration by allowing oceanwater overtopping during storm events. Since 1991, the dunes protecting the wetlands have been breached six times, resulting in saltwater intrusion to the freshwater wetlands. Very few plant or animal species have the adaptations needed to survive such large fluctuations or range of salinities (freshwater to saltwater). The saltwater intrusion has also encouraged the subsequent proliferation of the nuisance plant species Phragmites australis, also know as common reed. These conditions have significantly reduced the ability of the wetlands to support the wildlife and endangered plant species which reside there. It is estimated that an additional 147 acres of habitat will be by the year 2050 if shoreline erosion is to continue unabated.

Compounding the problem is the hydraulic/hydrologic relationship between Lower Cape May Meadows and the communities of Cape May Point and West Cape May. Lower Cape May Meadows serves as a buffer during storms between the ocean and the surrounding developed areas. When the Meadows area is inundated during storm events, the flood waters flow into Cape May Point and the developed portions of Lower Township and West Cape May, flooding the low lying areas of these towns.

Division: North Atlantic District: Philadelphia Lower Cape May Meadows, Cape May Point, NJ

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue construction	$1,691,000
Planning, Engineering and Design	$ 100,000
Construction Management	$ 50,000
Total	$1,841,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide all lands, easements, rights-of-way, and relocations.	$ 174,000	
Provide 35 percent of the initial construction costs assigned to the non-mitigation portion of the project for hurricane and storm damage reduction and, for the impacts attributable to Federal navigation works, share in the costs in the same proportion as the cost sharing provisions applicable to the project causing the erosion impacts (76 percent of project costs assigned to mitigation of jetty impacts).	$ 38,826,000	
Total Non-Federal Cost	$ 39,000,000	

STATUS OF LOCAL COOPERATION: The NJDEP is the non-Federal sponsor. The Project Cooperation Agreement (PCA) is scheduled to be executed in June 2003.

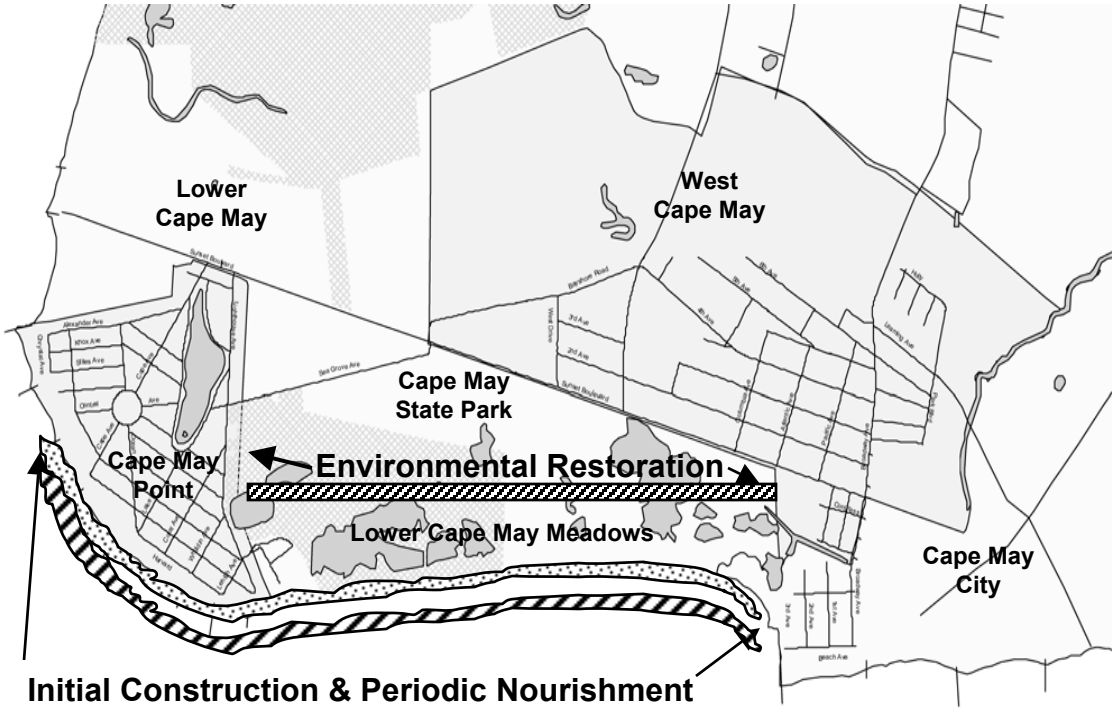
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $152,000,000 is a decrease of $4,000,000 from the latest estimate ($156,000,000) presented to Congress (FY 2003). This change includes the following items:

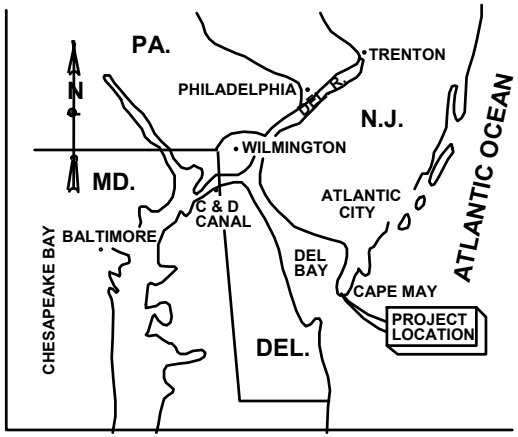
Item	Amount
Price Escalation On Construction Features	-$4,000,000
Total	-$4,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in November 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Funds to initiate construction were appropriated in FY 2002. The Administration is considering proposing changes to the cost share for shore protection projects.

Division: North Atlantic District: Philadelphia Lower Cape May Meadows, Cape May Point, NJ





VICINITY MAP

SCALE IN MILES

25 0 25 50

A T L A N T I C O C E A N

PLAN

SCALE IN FEET

2000 0 2000 4000

LEGEND

None

WORK COMPLETED AS OF 30 SEP 2002

WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003

WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004

WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004

LOWER CAPE MAY MEADOWS TO CAPE MAY POINT, NEW JERSEY

1 JANUARY 2003

SCALE AS SHOWN

U.S.ARMY ENGINEER DISTRICT, PHILA., PA

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Raritan Bay and Sandy Hook Bay, New Jersey (Continuing)

LOCATION: The overall project area encompasses 2.7 miles of shoreline in the Borough of Keansburg and in East Keansburg (located in Middletown Township), Monmouth County, and 0.6 miles of shoreline in Laurence Harbor (located in Old Bridge Township), Middlesex County, New Jersey. The project area lies along the Raritan Bay and Sandy Hook Bays shoreline between Sandy Hook and the mouth of the Raritan River.

DESCRIPTION: In 1973, the U.S. Army Corps of Engineers completed a project that consisted of groins, a beach berm, levees, pump station, floodwall, and a storm closure gate across Way Cake Creek in the Keansburg area. Similarly, the Corps constructed a beach berm and levees at Old Bridge in 1966. The renourishment project consists of the restoration of the previously constructed beach berm and renourishment on a periodic basis to reduce wave induced erosion and provide storm damage protection to commercial, public, and private properties and infrastructure.

AUTHORIZATION: Flood Control Act of October 12, 1962, Section 506 of WRDA 1996 authorized periodic nourishment for 50 years from initiation of construction, subject to a review of the project, in accordance with WRDA 1976 and Section 934 of WRDA 1986, as amended.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction has been completed.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Initial benefits are from the analysis contained in the General Design Memorandum revised January 1965, at May 1964 price levels. Updated benefits are from the draft Section 934 reevaluation report dated March 2001, at October 2000 price levels.

SUMMARIZED FINANCIAL DATA:			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$ 36,400,000		Initial Construction	100	Jan 1973
Initial Construction	10,900,000			Periodic Nourishment	0	TBD
Periodic Nourishment	25,500,000					
Estimated Non-Federal Cost		19,7000,000		PHYSICAL DATA:		
Initial Construction	2,000,000			Initial construction:		
Periodic Nourishment	17,300,000			Beachfill – 3.4 million cubic yards		
Other Costs	400,000			Levees, closure gate, pump station, groins		
Total Estimated Project Cost		56,100,000		Periodic nourishment: 5 year cycles		
Initial Construction	12,900,000			Keansburg/East Keansburg – 1.2 million cy first renourishment operation, and 431,000 cy for three subsequent cycles		
Periodic Nourishment	42,800,000					
Other Costs	400,000			Old Bridge – 276,000 cy first renourishment operation, and 81,000 cy for two subsequent cycles		
Allocation to 30 September 2002		11,858,000				
Conference Allowance for FY 2003		TBD				
Allocation for FY 2003		TBD				
Allocations through FY 2003		TBD				
Allocation Requested for FY 2004		100,000				
Programmed Balance to Complete after FY 2004		TBD				
Unprogrammed Balance to Complete after FY 2004		0				

JUSTIFICATION: Coastal storms have been a continuing source of damage and economic loss along the south shore of Raritan Bay. As a result of recent hurricanes, coastal storm events, and the lack of subsequent storm protection measures in these areas, the shore protection and flood control protection afforded by the Keansburg, East Keansburg, and Old Bridge beaches have been significantly reduced. Erosion has seriously reduced the width and height of the shorelines in the project area with consequent exposure of the shore and inland areas to tidal inundation and wave attack damages. Failure of the dune system at Keansburg, East Keansburg and Old Bridge would render the project levee features useless. A recurrence of the December 1992 northeaster would cause serious flood damages to residential and commercial and public structures in the Keansburg/ East Keansburg area and to structures and significant infrastructure in Old Bridge.

JUSTIFICATION: (continued)
Based on the reevaluation conducted under Section 934 of WRDA of 1986, the average annual benefits are as follows:

Storm Damage Reduction	$ 4,944,000
Recreation	200,000
Total	$ 5,144,000

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Nourishment Contract	$ 95,000
Construction Management	$ 5,000
Total	$ 100,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the Requirements listed below:

REQUIREMENTS OF LOCAL COOPERATION:	Payments During Construction and Reimbursement	Annual Operation, Maintenance and Replacement Costs
Pay 48 percent of initial construction costs in Old Bridge and 30 percent of initial construction costs in Keansburg and East Keansburg.	$ 2,000,000	$73,000
Pay 65 percent of the periodic nourishment costs for FY02 and beyond allocated to storm damage reduction, and 50 percent of the costs allocated to recreation, bear all costs of operation, maintenance, and replacement of storm reduction facilities	17,300,000	27,000
Provide lands, easements, and rights of way	$ 400,000	
Total Non-Federal Costs	$ 19,700,000	$0

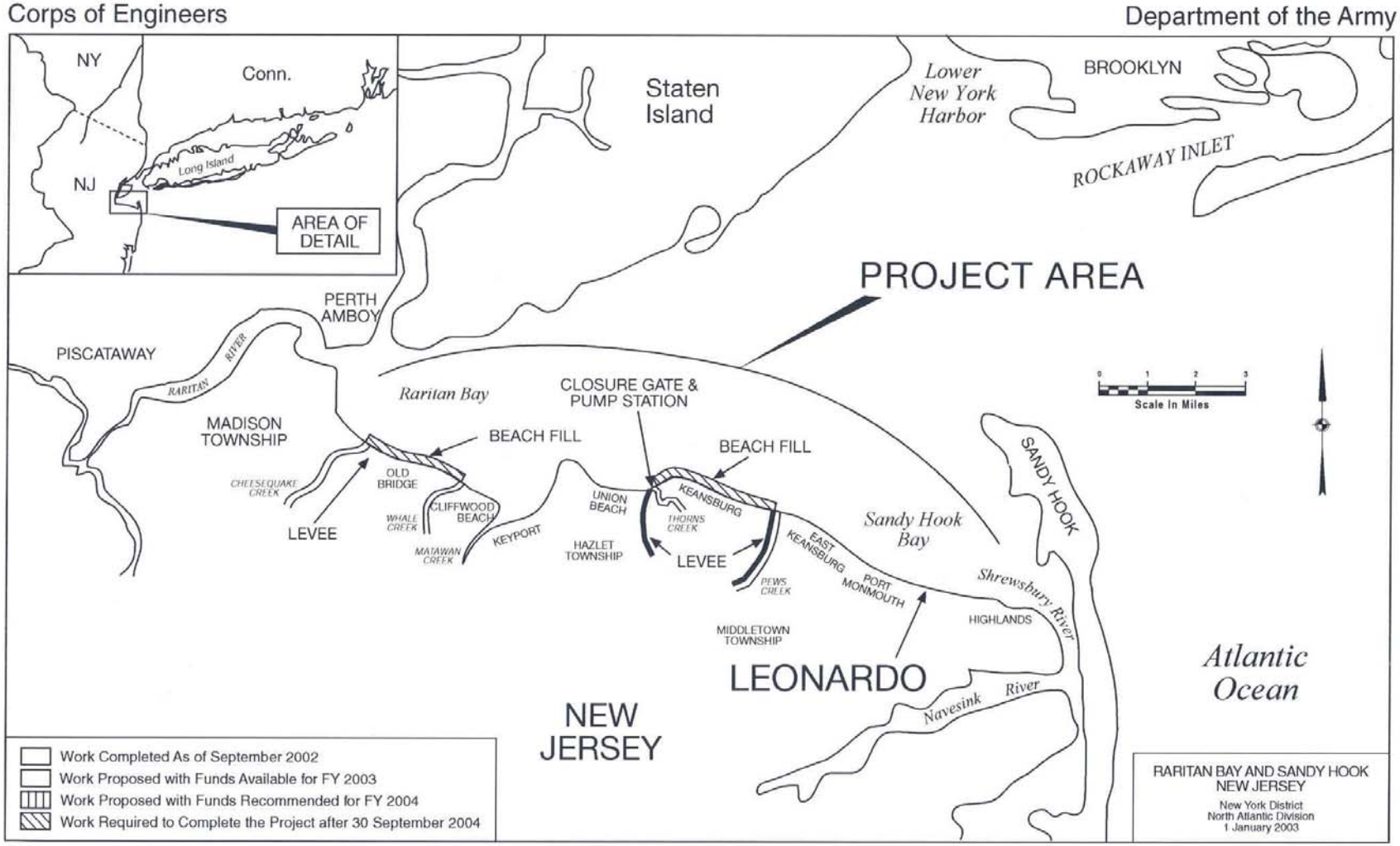
STATUS OF LOCAL COOPERATION: The non-Federal sponsor for this project is the New Jersey Department of Environmental Protection. The Project Cooperation Agreement is scheduled to be executed by May 2003. The New Jersey Department of Environmental Protection was also the sponsor for the initial project completed in 1973.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $36,400,000 is the same as the latest estimate ($36,400,000) presented to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final General Design Memorandum revised January 1965 predated the requirements of the National Environmental Policy Act. An Environmental Assessment for the extension of beach nourishment has been prepared and will be released for public review in May 2003.

OTHER INFORMATION: Funds for initiation of construction of the renourishment phase were appropriated in FY 1998. The Administration is considering proposing changes to the cost share for shore protection projects.

The existing Federal project for the Raritan Bay and Sandy Hook Bay was authorized by the Flood Control Act of October 12, 1962, as a dual purpose Beach Erosion Control and Hurricane Protection Project. Funds for construction of the original project were appropriated in FY 1965. A project was completed in the area in 1973. The original project did not include provisions for periodic nourishment. Section 506 of the Water Resources Development Act of 1996 authorizes periodic nourishment for 50 years from initiation of construction, subject to a review of the project, in accordance with WRDA 1976 and Section 934 of WRDA 1986, as amended.


Corps of Engineers
Department of the Army
NY
Conn.
NJ
Long Island
AREA OF DETAIL
Staten Island
Lower New York Harbor
BROOKLYN
ROCKAWAY INLET
PROJECT AREA
PERTH AMBOY
PISCATAWAY
RARITAN RIVER
Raritan Bay
CLOSURE GATE & PUMP STATION
MADISON TOWNSHIP
BEACH FILL
BEACH FILL
CHEESEQUAKE CREEK
OLD BRIDGE
WHALE CREEK
CLIFFWOOD BEACH
MATAWAN CREEK
KEYPORT
UNION BEACH
HAZLET TOWNSHIP
KEANSBURG
THORNS CREEK
LEVEE
LEVEE
PEWS CREEK
EAST KEANSBURG
PORT MONMOUTH
Sandy Hook Bay
SANDY HOOK
Shrewsbury River
HIGHLANDS
MIDDLETOWN TOWNSHIP
LEONARDO
Navesink River
Atlantic Ocean
NEW JERSEY
Scale In Miles
Work Completed As of September 2002
Work Proposed with Funds Available for FY 2003
Work Proposed with Funds Recommended for FY 2004
Work Required to Complete the Project after 30 September 2004
RARITAN BAY AND SANDY HOOK
NEW JERSEY
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Sandy Hook to Barnegat Inlet, New Jersey (Continuing)

LOCATION: The overall project area lies along the Atlantic Ocean shoreline of New Jersey in Monmouth and Ocean Counties between Sandy Hook to the North and Barnegat Inlet to the South. Section I - The Sea Bright to Ocean Township section lies solely within Monmouth County. The Sea Bright to Ocean Township section is the northernmost 12 miles of the project, which includes the following communities: Sea Bright, Long Branch, Deal, Allenhurst, and Ocean Township. Section II - Asbury Park to Manasquan section comprises the southern portion of Monmouth County and is approximately 9 miles long. It includes the following communities: Asbury Park, Ocean Grove, Bradley Beach, Avon-by-the Sea, Belmar, Spring Lake, Sea Girt, State Encampment, and Manasquan.

DESCRIPTION: The recommended plan for Section I, Sea Bright to Ocean Township, includes construction of a 100-foot-wide-berm at an elevation of 10 feet above mean low water with an additional 2-foot-high-storm-berm cap along the entire 12 miles of project shoreline extending from Sea Bright to Ocean Township. The recommended plan for Section II, Asbury Park to Manasquan, includes construction of a berm 100 feet wide at an elevation of 8.4 feet above mean low water. All work on Sections I and II is programmed. Section III, Point Pleasant to Seaside Park, was deauthorized.

AUTHORIZATION: The River and Harbor Act of 3 July 1958 for Sections I and II, the Water Resources Development Act of 1986, and the Water Resources Development Act of 1988.

REMAINING BENEFITS-REMAINING COST RATIO: 1.4 to 1 at 8 1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8 1/8 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 8 1/8 percent (FY 1985).

BASIS OF BENEFITS-COST RATIO: Benefits are from the analysis contained in the General Design Memorandum revised March 1990 at June 1988 price levels. For Section II, Asbury Park to Manasquan Inlet, benefits are from the General Design Memorandum, dated May 1994, at June 1992 price levels.

SUMMARIZED FINANCIAL DATA:			ACCUM. PCT. OF EST. FED. COST
Estimated Federal Cost		$ 918,800,000	
Initial Construction	132,300,000		
Periodic Nourishment	786,500,000		
Estimated Non-Federal Cost		494,800,000	
Initial Construction	119,400,000		
Cash Contributions	71,100,000		
Other Costs	48,300,000		
Periodic Nourishment	375,400,000		
Cash Contributions	375,400,000		
Other Costs	0		
Total Estimated Project Cost		$ 1,413,600,000	
Initial Construction	251,700,000		
Periodic Nourishment	1,161,900,000		

Allocations to 30 September 2002	124,802,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocations through FY 2003	TBD
Allocation Requested for FY 2004	3,000,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2004	0

STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Sea Bright to Ocean Township	14	TBD
Asbury Park to Manasquan	10	TBD
Entire Project	13	TBD
Initial Construction	76	TBD
Periodic Nourishment	0	TBD

PHYSICAL DATA

Sea Bright to Ocean Township; Beach Placement over 12 miles; notching existing groins.

Asbury Park to Manasquan: Beach Placement over 9 miles, notching existing groins.

JUSTIFICATION: Erosion has seriously reduced the width of most beaches in the study area with consequent exposure of shore to storm damage. Because of this erosion of the shore, the area does not provide sufficient recreational beaches for the proper accommodation of the present and prospective tributary population. The State of New Jersey and mayors of affected communities are very concerned over the increased potential for damages to structures due to the eroded condition of the existing beaches. The March 1962 storm caused $40,400,000 in damages (October 1993 price levels) along the twenty five mile stretch of shore from Sandy Hook to Manasquan Inlet. Subsequent emergency restoration works in this reach cost $7,383,000 (October 1988 price levels). In Section I, the restored beach has eroded while the area behind the seawall is more densely developed. Section II suffers from eroding beaches also. The storms of 30 and 31 October 1991, and 3 to 5 January 1992, caused $6,500,000 in damages to shore structures and the small beach seaward of the recently rebuilt state seawall within the project area. The rebuilt seawall was overtopped by the significant ocean waves, and its seaward toe is severely threatened by undercutting and collapse because of the lack of beach. The average annual benefits from erosion control measures are $53,151,000. For Section II, the average annual benefits from erosion control measures are $11,878,000.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Section I, Seabright-Ocean Township	
Post-Construction Monitoring	100,000
Section II, Asbury Park to Manasquan	
Initiate Nourishment Contract I	$ 2,600,000
Post-Construction Monitoring	150,000
Construction Management	150,000
Total	$ 3,000,000

NON-FEDERAL COSTS: Consistent with the Water Resources Development Act of 1988, the non-Federal share of the first $40,000,000 of construction of the Sea Bright to Ocean Township reach consists of monies expended by non-Federal interests for reconstruction of the seawall at Sea Bright and Monmouth Beach, New Jersey. Cost sharing of the project, in excess of the first $40,000,000 increment, is in accordance with Title I of the Water Resources Development Act of 1986. Section I requirements also include lands, easements, rights-of-way and relocations. In Section II, the non-Federal share includes a cash contributions plus lands, easements, rights-of-way, and relocations. The combined Section I and Section II requirements follow:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance and Replacement Costs
Provide all lands, easements, and rights-of-way, and relocations for Sections I and II.	$36,100,000	$ 5,180,000
Of the first $40,000,000 in costs for initial construction of Section I, non-Federal interests are required to pay for reconstruction of the seawall at Sea Bright and Monmouth Beach, New Jersey. Thereafter, the non-Federal share is to be 35 percent of the initial project costs in excess of $40,000,000, excluding non-creditable lands, easements, and rights-of way, and bear all costs of operation and maintenance and replacement of storm damage reduction facilities.	50,100,000	11,960,000
Pay 35 percent of the first costs of Section II, excluding non-creditable lands, easements, and rights-of-way, and bear all cost of operation and maintenance and replacement of storm damage reduction facilities.	21,000,000	5,410,000
Pay 35 percent of the cost of periodic nourishment for Sections I and II for FY02 and beyond	375,400,000	
Reconstruct Seawall at Sea Bright and Monmouth Beach (Project requirement).	12,200,000	1,100,000
Total Non-Federal Costs	$ 494,800,000	$23,650,000

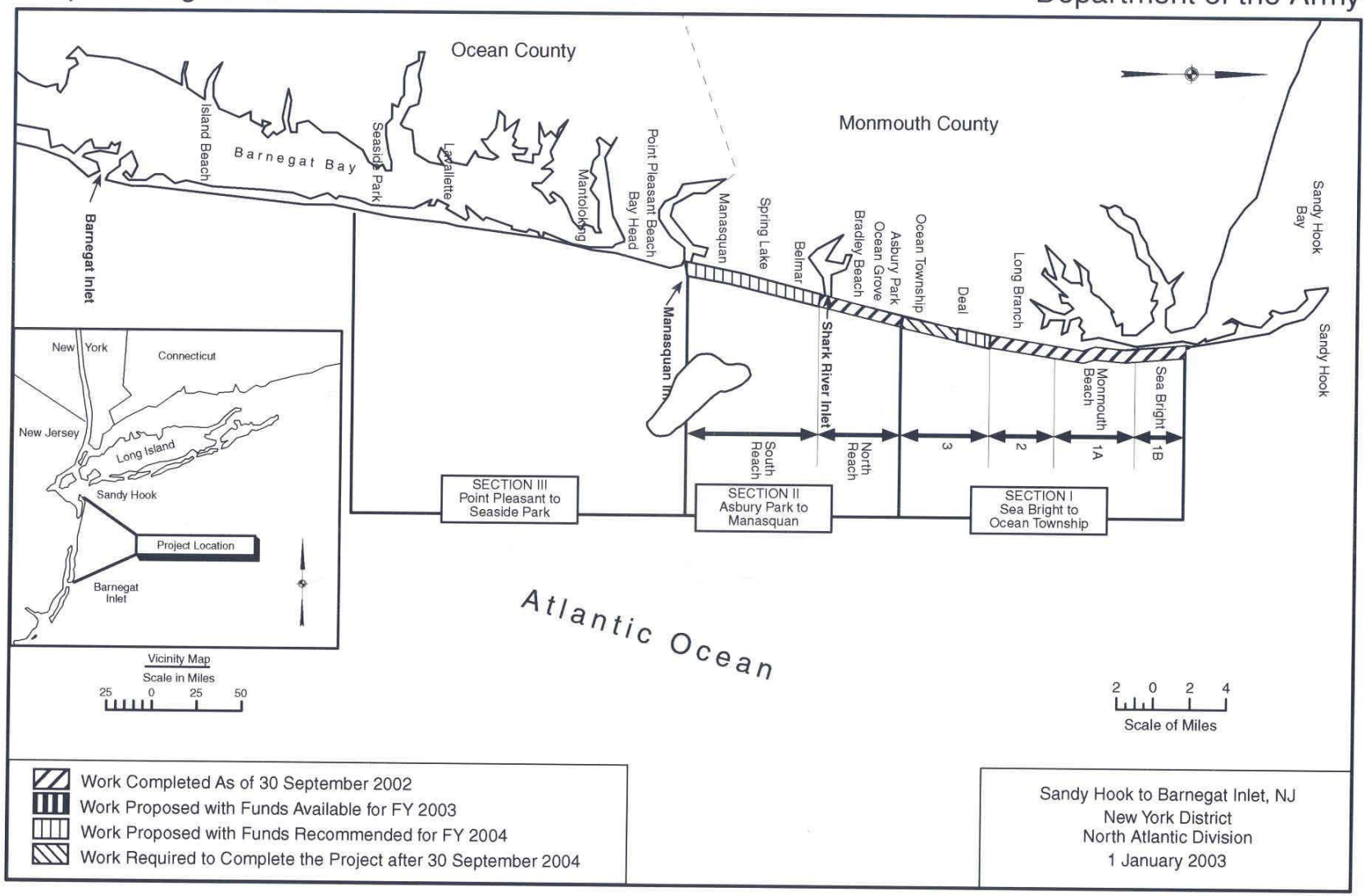
STATUS OF LOCAL COOPERATION: The Local Cooperation Agreement for Section I was signed on 30 July 1992 with the State of New Jersey Department of Environmental Protection (NJDEP). For Section II, the Project Cooperation Agreement was executed in August 1996.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $918,800,000 is a decrease of $15,000,000 from the latest estimate ($933,800,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price escalation on Construction Features	- $ 15,000,000
Total	- $ 15,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (EIS) for Section I (Seabright to Ocean Township) was filed with the Environmental Protection Agency (EPA) in June 1990. A Record of Decision was signed on 26 November 1990. The EIS for Section II was filed with the EPA in August 1993. A Record of Decision was signed in April 1996.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985. Project benefits, costs, and financial data reflect Section I and Section II only. The Administration is considering proposing changes to the cost share for shore protection projects.


Corps of Engineers
Department of the Army
Ocean County
Monmouth County
Barnegat Bay
Island Beach
Seaside Park
Lavallette
Mantoloking
Point Pleasant Beach
Bay Head
Manasquan
Spring Lake
Belmar
Bradley Beach
Asbury Park
Ocean Grove
Ocean Township
Deal
Long Branch
Monmouth Beach
Sea Bright
Sandy Hook Bay
Sandy Hook
Barnegat Inlet
Manasquan Inlet
Shark River Inlet
South Reach
North Reach
3
2
1A
1B
SECTION III
Point Pleasant to
Seaside Park
SECTION II
Asbury Park to
Manasquan
SECTION I
Sea Bright to
Ocean Township
New York
Connecticut
New Jersey
Long Island
Sandy Hook
Project Location
Barnegat
Inlet
Vicinity Map
Scale in Miles
25 0 25 50
Atlantic Ocean
2 0 2 4
Scale of Miles
Work Completed As of 30 September 2002
Work Proposed with Funds Available for FY 2003
Work Proposed with Funds Recommended for FY 2004
Work Required to Complete the Project after 30 September 2004
Sandy Hook to Barnegat Inlet, NJ
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General – Shoreline Protection

PROJECT: Townsends Inlet to Cape May Inlet, New Jersey (Continuing)

LOCATION: The site of the recommended project is located on the Atlantic Coast of New Jersey, approximately 23 miles southwest of Atlantic City. It includes the communities of Avalon, Stone Harbor, and North Wildwood.

DESCRIPTION: The recommended project consists of five reaches for shoreline protection for Avalon, Stone Harbor and North Wildwood, NJ, and an environmental restoration project for Stone Harbor Point. The shoreline protection portion of the project includes: (1) the construction of stone seawalls for the first and second reaches at the inlet frontages at Avalon and North Wildwood with seawalls at top elevations of 14 feet and 13 feet above mean low water respectively, extending for approximately 2,970 linear feet in Avalon and 8,660 linear feet in North Wildwood and would encompass the existing non-Federal bulkheads, rock revetments, and seawalls; and (2) the placement of 4.6 million cubic yards of initial beachfill with 800,000 cubic yards of periodic nourishment every three years for the third and fourth reaches for the oceanfronts of Avalon and Stone Harbor (Seven Mile Island). The beach fill segments will provide berm widths of 150 feet at elevation 8.5 feet above mean low water and dunes 7.5 feet above grade at elevation 16 feet above mean low water. The dunes would have a total length of 22,500 feet, a crest width of 25 feet, and would include dune grass plantings and sand fencing. The ecosystem restoration portion of the project includes an oceanfront berm 150 feet wide with a crest width of 25 feet at elevation 8.5 feet above mean low water for the fifth reach at Stone Harbor Point. This berm would extend 1,000 linear feet southwest of the terminal groin in Stone Harbor. The plan also includes the planting of approximately 3 acres of dune grass and 64 acres of bayberry and eastern red cedar. No periodic nourishment would be included with this project feature.

AUTHORIZATION: Water Resource Development Act 1999, Section 101(a)(26).

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 6 7/8 percent

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 6 7/8 percent (FY 2001)

BASIS OF BENEFIT-COST RATIO: Townsends Inlet to Cape May Inlet feasibility study. Chief’s Report dated 28 September 1998

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		$ 308,000,000
Initial Construction	46,424,900	
Periodic Nourishment	261,575,100	
Estimated non-Federal Cost		$ 168,000,000
Initial Construction	27,402,000	
Cash Contributions	25,699,800	
Other Costs	1,702,200	
Periodic Nourishment	140,598,000	
Cash Contributions	140,598,000	
Other Costs	0	
Total Estimated Project Cost		$ 476,000,000
Initial Construction	73,826,900	
Periodic Nourishment	402,173,100	

Allocations to 30 September 2002	5,309,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocations through FY 2003	TBD
Allocations Requested for FY 2004	9,200,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2004	0

STATUS: (1 Jan 2003)	PERCENT COMPLETE	COMPLETION SCHEDULE
Initial Beachfill	30	Sept 2003
Periodic Nourishment	0	TBD
Seawalls	0	TBD
Ecosystem Restoration	0	TBD
Entire Project	0	TBD

PHYSICAL DATA: Stone Harbor Point: 4.3 miles of beachfill, berm width of 150-foot and dune height of +16-feet. Avalon and Stone Harbor: 2.2 miles of seawall construction. Stone Harbor Point: Ecosystem restoration of approximately 107 acres of natural barrier island with beach-fill and dune construction with periodic nourishment and planting of 67 acres of bayberry and red cedar roosting habitat.

ACCUMULATED PCT OF EST. FED. COST

JUSTIFICATION: The area has been subjected to major flooding, erosion and wave attack during storms, causing damage to structures, and, since 1992, was declared a National Disaster Area by the President of the United States on three separate occasions. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, which has increased the potential for storm damage. In addition, valuable fish and wildlife habitat along the southern end of Stone Harbor has been lost to erosion.

Division: North Atlantic District: Philadelphia Townsends Inlet to Cape May Inlet, NJ

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue construction	$ 7,800,000
Planning, Engineering and Design	877,000
Construction Management	523,000
Total	$ 9,200,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way	$ 102,200	
Modify or relocate utilities, roads, bridges, Other facilities, where necessary for the construction of the project.	$1,600,000	
Pay 35 percent of the all costs allocated to hurricane and storm damage reduction and ecosystem restoration	25,699,800	
Pay 35 percent of the cost of periodic nourishment	140,598,000	
Total Non-Federal Costs	168,000,000	

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey Department of the Environmental Protection (NJDEP). The Project Cooperation Agreement was executed in March 2002.

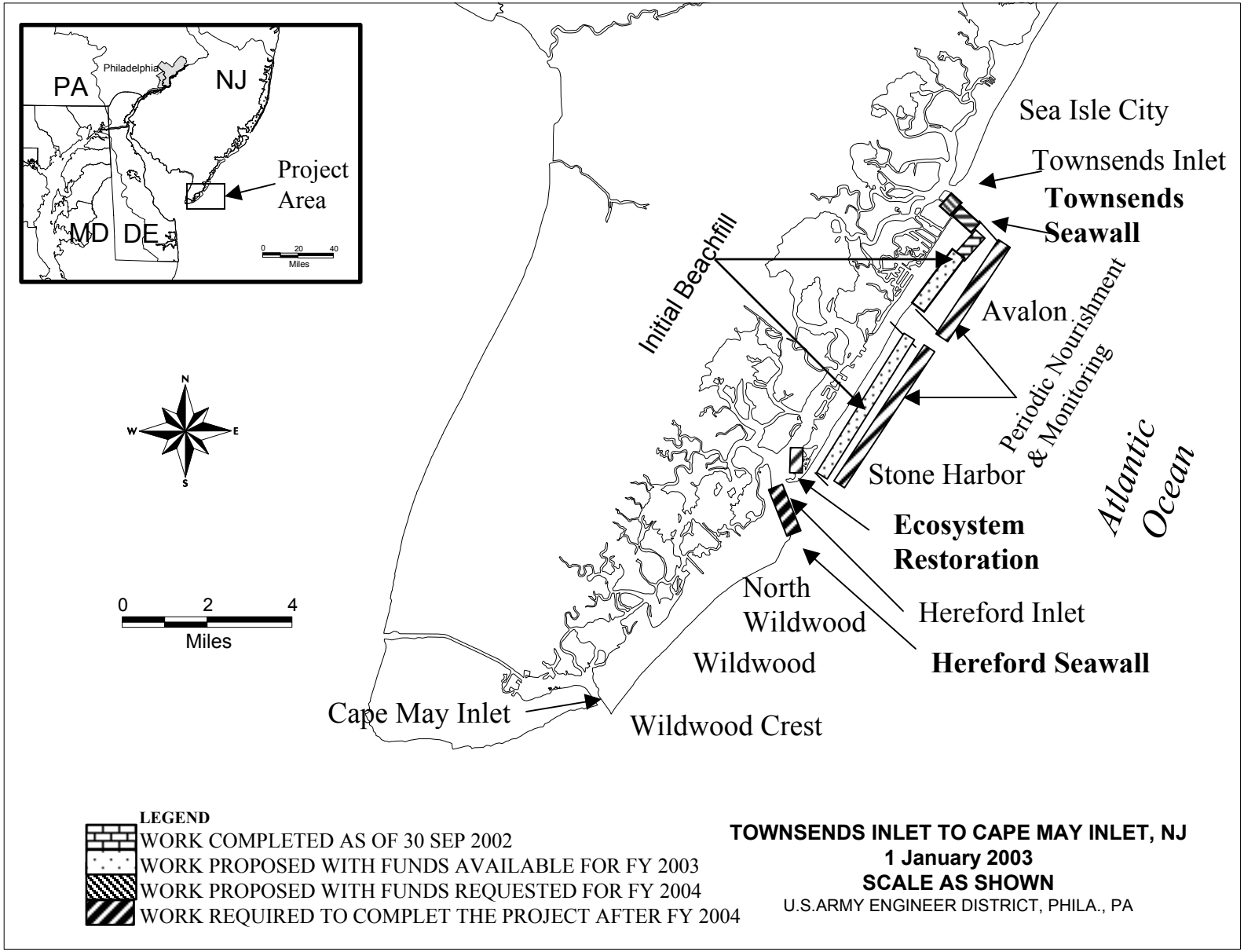
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $308,000,000 is an increase of $18,000,000 from the latest estimate ($290,000,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 18,000,000
Total	$ 18,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was completed in March 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001. The Administration is considering proposing changes to the cost share for shore protection projects.

Division: North Atlantic District: Philadelphia Townsends Inlet to Cape May Inlet, NJ


PA
Philadelphia
NJ
MD
DE
Project Area
0 20 40
Miles
N
W
E
S
0 2 4
Miles
Sea Isle City
Townsends Inlet
Townsends Seawall
Initial Beachfill
Avalon
Periodic Nourishment & Monitoring
Atlantic Ocean
Stone Harbor
Ecosystem Restoration
North Wildwood
Hereford Inlet
Wildwood
Hereford Seawall
Cape May Inlet
Wildwood Crest
LEGEND
WORK COMPLETED AS OF 30 SEP 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
WORK REQUIRED TO COMPLET THE PROJECT AFTER FY 2004
TOWNSENDS INLET TO CAPE MAY INLET, NJ
1 January 2003
SCALE AS SHOWN
U.S.ARMY ENGINEER DISTRICT, PHILA., PA

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Atlantic Coast of New York City, Rockaway Inlet to Norton Point, Coney Island, New York (Continuing)

LOCATION: The project is located on the South shore of Long Island in Brooklyn (Kings County), New York, approximately nine miles south of the Battery, New York City.

DESCRIPTION: Programmed work consists of construction of a 100-foot-wide berm at an elevation of 13 feet above mean low water, a groin at the western end of the restored beach, and a fillet of beachfill extending westward from the groin at West 37th Street. Unprogrammed work includes construction of comfort and lifeguard stations, construction of a groin at east end of project and extending beach seaward of historic shoreline.

AUTHORIZATION: Water Resources Development Act of 1986 as modified by the Intermodal Surface Transportation and Efficiency Act of 1991.

REMAINING BENEFIT-REMAINING COST RATIO: 2.7 to 1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 2.7 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 2.8 to 1 at 8 7/8 percent (FY 1992).

BASIS OF BENEFIT-COST RATIO: Final General Design Memorandum entitled Atlantic Coast of New York City, Rockaway Inlet to Norton Point (Coney Island Area), New York, dated April 1992, at October 1990 price levels.

STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Programmed Work		
Initial Construction	65	Sep 2004
Periodic Nourishment	0	TBD
Entire Project	20	TBD
Unprogrammed Work		
Comfort and Lifeguard Stations	0	Indefinite
Groin and additional Beach Berm	0	Indefinite

1/ For programmed work only; remaining work is indefinite pending a decision to construct these features.

SUMMARIZED FINANCIAL DATA:

			ACCUM. PCT. OF EST. FED COST
Estimated Federal Cost		112,100,000	
Programmed Construction		78,200,000	
Initial Construction	21,700,000		
Periodic Nourishment	54,000,000		
Comfort and Lifeguard Stations	2,500,000		
Unprogrammed Construction		33,900,000	
Initial Construction	15,900,000		
Periodic Nourishment	0		
Comfort and Lifeguard Stations	18,000,000		
Estimated Non-Federal Cost		56,600,000	
Programmed Construction		40,700,000	
Initial Construction	11,700,000		
Cash Contribution	11,700,000		
Other Costs	0		
Periodic Nourishment	29,000,000		
Cash Contributions	29,000,000		
Other Costs	0		
Unprogrammed Construction		15,900,000	
Initial Construction	15,900,000		
Cash Contribution	15,900,000		
Other Costs	0		
Periodic Nourishment		0	
Cash Contributions	0		
Other Costs	0		
Comfort and Lifeguard Stations	0		

PHYSICAL DATA

Berm 100 feet wide at 13 feet NGVD
Extended berm 165 feet wide at 8 feet NGVD.
Groins at the eastern and western ends of the restored beach.

Fillet of beachfill extending westward from groin at West 37th St.
Relocation and/or reconstruction of existing comfort and lifeguard stations.

Division: North Atlantic District: New York

Atlantic Coast of New York City, Rockaway Inlet to Norton Point, Coney Island, NY

SUMMARIZED FINANCIAL DATA: (Continued)

			ACCUM. PCT. OF EST. FED COST
Total Estimated Programmed Construction Cost		118,900,000	
Initial Construction	33,400,000		
Periodic Nourishment	83,000,000		
Comfort and Lifeguard Stations	2,500,000		
Total Estimated Unprogrammed Construction Cost		49,800,000	
Initial Construction	31,800,000		
Periodic Nourishment	0		
Comfort and Lifeguard Stations	18,000,000		
Total Estimated Project Cost		168,700,000	
Initial Construction	65,200,000		
Periodic Nourishment	83,000,000		
Comfort and Lifeguard Stations	20,500,000		
Allocation to 30 September 2002		15,997,000	
Conference allowance for FY 2003		TBD	
Allocation for FY 2003		TBD	
Allocations through FY 2003		TBD	
Allocation Requested for FY 2004		1,750,000	
Programmed Balance to Complete after FY 2004		TBD	
Unprogrammed Balance to Complete after FY 2004		TBD	

JUSTIFICATION: Erosion had caused serious damage to the shoreline extending through the communities of Coney Island, Brighton Beach, and Sea Gate, New York. Due to this erosion, residential and commercial developments had become increasingly susceptible to storm damage from wave attack and inundation. In March 1962, a severe northeast storm caused breaching and failure of the breach and shore protection structures with damages estimated at $18,000,000. A recurrence of the March 1962 storm would have caused damages of approximating $56,000,000 (October 1989 price levels) without the project in place. A 100 year event would cause storm damage by wave attack in excess of $156,000,000 at October 1993 prices. Project implementation has eliminated these damages.
Average annual benefits are as follows:

Benefits	Amount
Shoreline Protection	$6,780,000
Recreation	1,040,000
Total	$7,820,000

Division: North Atlantic District: New York Atlantic Coast of New York City, Rockaway Inlet to Norton Point, Coney Island, NY

Fiscal Year 2004: The requested amount will be applied as follows:

Initiate Nourishment Contract #1	$ 1,500,000
Planning, Engineering and Design	$ 100,000
(Post-Construction Monitoring)	
Construction Management	$ 150,000
Total	$ 1,750,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the Requirements listed below:

Requirement of Local Cooperation	Payments During Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Pay 35 percent of the costs of periodic nourishment allocated to storm damage reduction and 50 percent of the costs allocated to recreation, bear all costs of operation, maintenance and replacement of storm reduction facilities	$ 56,600,000	$950,000
Total Non-Federal Costs	$ 56,600,000	$950,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsor for this project is the New York State Department of Environmental Conservation. The Local Cooperation Agreement for this project was executed in October 1993.

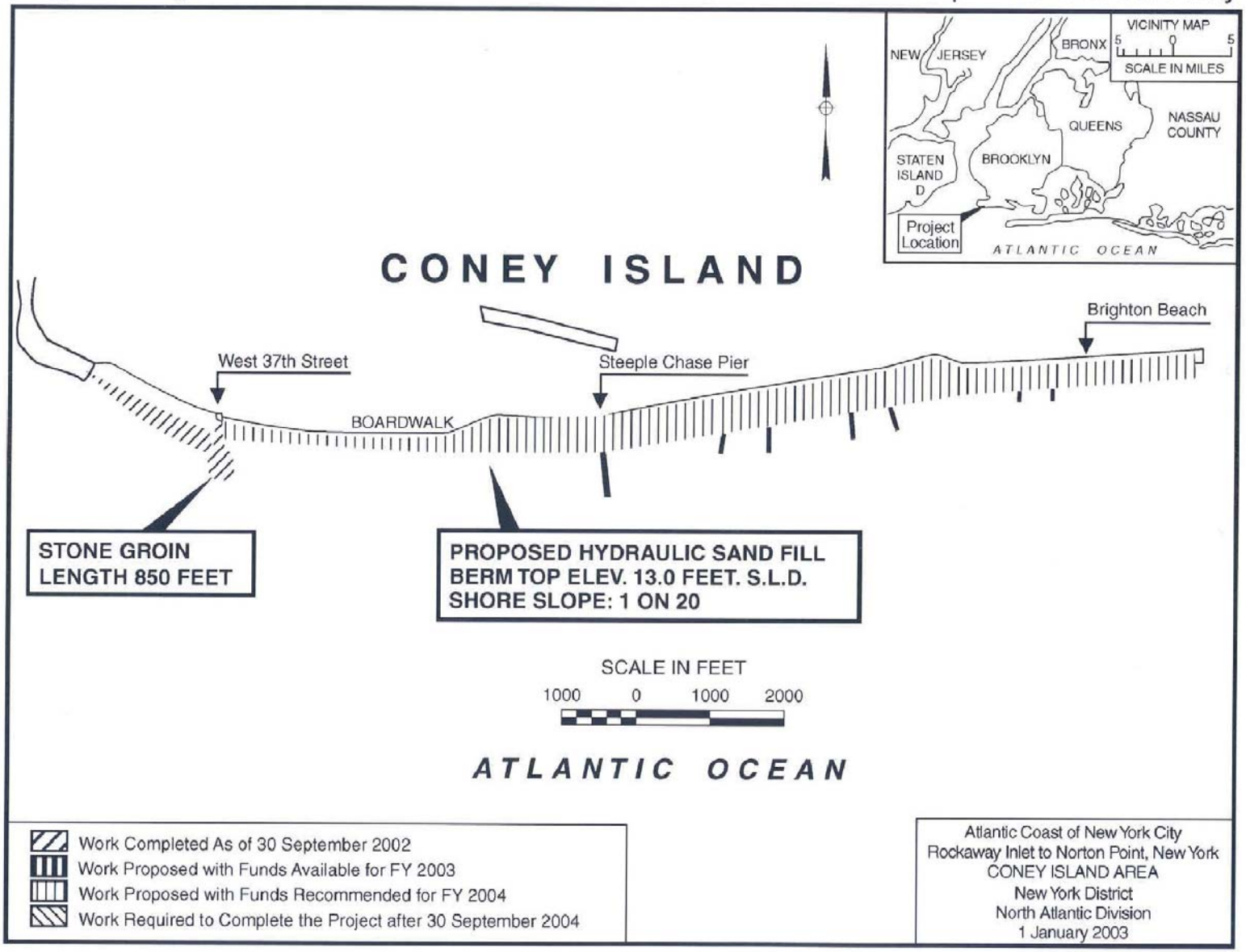
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $112,100,000 is an increase of $8,300,000 from the latest estimate ($103,800,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 8,300,000
Total	$ 8,300,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Supplemental Environmental Impact Statement was filed with the United States Environmental Protection Agency on 5 June 1992.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1992. The Administration is considering proposing changes to the cost share for shore protection projects.

Division: North Atlantic District: New York Atlantic Coast of New York City, Rockaway Inlet to Norton Point, Coney Island, NY


VICINITY MAP
5 0 5
SCALE IN MILES
NEW JERSEY
BRONX
QUEENS
NASSAU COUNTY
STATEN ISLAND
BROOKLYN
Project Location
ATLANTIC OCEAN
CONEY ISLAND
Brighton Beach
West 37th Street
Steeple Chase Pier
BOARDWALK
STONE GROIN
LENGTH 850 FEET
PROPOSED HYDRAULIC SAND FILL
BERM TOP ELEV. 13.0 FEET. S.L.D.
SHORE SLOPE: 1 ON 20
SCALE IN FEET
1000 0 1000 2000
ATLANTIC OCEAN
Work Completed As of 30 September 2002
Work Proposed with Funds Available for FY 2003
Work Proposed with Funds Recommended for FY 2004
Work Required to Complete the Project after 30 September 2004
Atlantic Coast of New York City
Rockaway Inlet to Norton Point, New York
CONEY ISLAND AREA
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, New York (Continuing)

LOCATION: The project is located on the South shore of Long Island between East Rockaway Inlet and Rockaway Inlet, approximately seven miles southeast of the Battery, New York City. The coastal area is a peninsula located entirely within the Borough of Queens, New York City. The project also includes the lands within and surrounding Jamaica Bay. The greater portion of Jamaica Bay lies in the Boroughs of Brooklyn and Queens, New York City, with a small section at the easterly end, known as Head of Bay in Nassau County, New York.

DESCRIPTION: The authorized project work consists of nourishing a 100 to 200 foot wide beach at an elevation of 10 feet above mean low water from Beach 149th Street to Beach 19th Street.

AUTHORIZATION: Water Resources Development Act of 1974 and Water Resources Development Act of 1986 (Section 934).

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction has been completed.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 5 1/2 percent (FY 1974).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in June 1993 at December 1992 prices.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		63,700,000				
Initial Construction	8,813,500					
Periodic Nourishment	54,886,500			Contract No. 6	100	Nov 1996
Contracts 1-5	16,386,500			Contract No. 7	100	Nov 2001
Contracts 6-8	38,500,000			Contract No. 8	0	TBD
				Entire Project	67	TBD
				Beach Nourishment	67	TBD

SUMMARIZED FINANCIAL DATA: (continued)			ACCUM. PCT. OF EST. FED. COST	PHYSICAL DATA
Estimated Non-Federal Cost		45,900,000		Original Periodic Nourishment of the beach between Beach 19th Street and Beach 149th Street, a distance of 4 2 miles, to maintain the berm to a width of 100-200 feet at elevation 10 feet above mean low water.
Initial Construction	8,813,500			
Periodic Nourishment	37,086,500			
Contracts 1-5	16,386,500			
Contracts 6-8	20,684,000			
Other Costs	16,000			
Total Estimated Project Cost		109,600,000		
Initial Construction	17,627,000			
Periodic Nourishment	91,957,000			
Other Costs	16,000			
Allocation to 30 September 2002		43,031,000		
Conference Allowance for FY 2003		TBD		
Allocation for FY 2003		TBD		
Allocations through FY 2003		TBD		
Allocation Requested for FY 2004		1,250,000		
Programmed Balance to Complete after FY 2004		TBD		
Unprogrammed Balance to Complete after FY 2004		0		

JUSTIFICATION: The Rockaway peninsula is subject to frequent and severe damage from tidal inundation from the ocean and the bay. Along the oceanfront, a serious erosion problem has resulted from storms which reduce beach widths, expose waterfront development from wave attack, and cause loss of recreational beach area. The project area is approximately 4 miles of urban shorefront, principally used for recreation purposes. Large sections of the high water beach periodically erodes. Unusually severe storms occurred in September 1921, September 1960, March 1962, and April 1967. The September 1960 storm caused maximum storm tide of record, flooded 3,500 acres of developed land, and resulted in losses exceeding $17,800,000. About 6,000 residences and hundreds of commercial buildings were severely damaged. Boats and waterfront facilities were badly hit. Public utilities and transportation were seriously disrupted. The project area was included in declared disaster areas after the September 1960 and March 1962 storms. Appreciable damage resulted from the April 1967 storm, causing local agencies to place about 250,000 cubic yards of beach fill under emergency conditions at an estimated cost of $400,000. In October 1991 and December 1992, the area experienced flooding

JUSTIFICATION: (continued)
and beach erosion. A Presidential disaster was declared for the area following the December 1992 storm. The reevaluation conducted under Section 934 of WRDA 1986 recommended continued Federal participation in three additional periodic nourishment cycles for the storm damage reduction features of the project. The Section 934 reevaluation report also recommended further analyses to determine whether modifications to the project are warranted to reduce the cost of future periodic nourishment. Based on the reevaluation conducted under Section 934 of WRDA of 1986, the average annual benefits are as follows:

Storm Damage Reduction	$ 3,400,000
Recreation	6,370,000
Total	$ 9,770,000

FISCAL YEAR 2004: The requested amount will be applied as follows:

Reformulation	$ 100,000
Initate Periodic Nourishment Contract #8	$ 1,000,000
Planning, Engineering and Design	$ 50,000
Construction Management	$ 100,000
Total	$ 1,250,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the Requirements listed below:

REQUIREMENTS OF LOCAL COOPERATION:	Payments During Construction and Reimbursement	Annual Operation, Maintenance and Replacement Costs
Pay 50 percent of initial construction cost and nourishment operations 1-5	$25,200,000	
Pay 35 percent of the periodic nourishment costs allocated to storm damage reduction, and 50 percent of the costs allocated to recreation, bear all costs of operation, maintenance, and replacement of storm reduction facilities	20,684 ,000	
Provide lands, easements, and rights of way	16,000	
Total Non-Federal Costs	$45,900,000	$0

Division: North Atlantic District: New York East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, NY

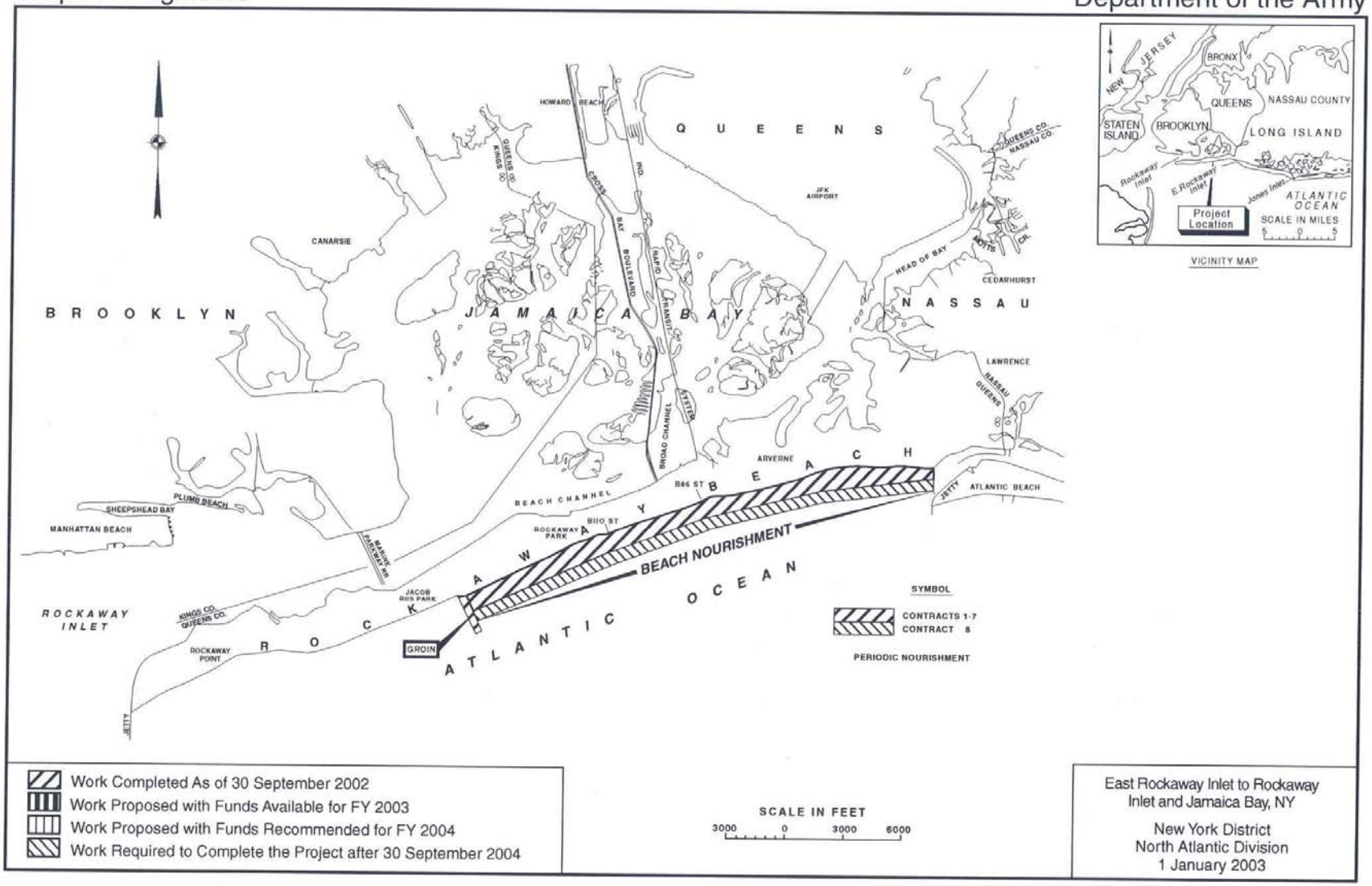
STATUS OF LOCAL COOPERATION: The non-Federal sponsor for this project is the New York State Department of Environmental Conservation. The project cooperation agreement (PCA) for this project, to extend the beach nourishment period was executed in May 1995. The New York State Department of Environmental Conservation was the sponsor for the initial project in 1975 and for the first five nourishment operations through 1988.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $63,700,000 is an increase of $1,100,000 from the latest estimate ($62,600,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price escalation on Contract Level	$ 1,100,000
Total	$ 1,100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 13 May 1974 for the initial project and nourishment. An Environmental Assessment for the extension of beach nourishment was filed with the United States Environmental Protection Agency in April 1994.

OTHER INFORMATION: Funds for initial construction were appropriated in FY 1974. Funds for the original 5 cycles of periodic nourishment were appropriated through FY 1988. Funds to initiate the continuation of periodic nourishment were appropriated in FY 1994. The periodic nourishment period has been extended for an additional 3 nourishment cycles under authority of Section 934 of the Water Resources Development Act of 1986. The Administration is considering proposing changes to the cost share for shore protection projects.


HOWARD BEACH
QUEENS
QUEENS CO.
KINGS CO.
CROSS BAY BOULEVARD
IND.
JFK AIRPORT
QUEENS CO.
NASSAU CO.
CANARSIE
BROOKLYN
JAMAICA BAY
NASSAU
HEAD OF BAY
MOTTS CR.
CEDARHURST
FRANKLIN
RAPID
LAWRENCE
NASSAU
QUEENS
OYSTER
BROAD CHANNEL
ARVERNE
B E A C H
86 ST
JETTY
ATLANTIC BEACH
BEACH CHANNEL
PLUMB BEACH
SHEEPSHEAD BAY
MANHATTAN BEACH
ROCKAWAY PARK
B110 ST
A Y
BEACH NOURISHMENT
MARINE PARKWAY BR.
JACOB RIIS PARK
ROCKAWAY INLET
KINGS CO.
QUEENS CO.
ROCKAWAY POINT
R O C K A W
A T L A N T I C O C E A N
GROIN
JETTY
SYMBOL
CONTRACTS 1-7
CONTRACT 8
PERIODIC NOURISHMENT
NEW JERSEY
BRONX
QUEENS
NASSAU COUNTY
STATEN ISLAND
BROOKLYN
LONG ISLAND
Rockaway Inlet
E.Rockaway Inlet
Jones Inlet
ATLANTIC OCEAN
Project Location
SCALE IN MILES
5 0 5
VICINITY MAP
Work Completed As of 30 September 2002
Work Proposed with Funds Available for FY 2003
Work Proposed with Funds Recommended for FY 2004
Work Required to Complete the Project after 30 September 2004
SCALE IN FEET
3000 0 3000 6000
East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, NY
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Fire Island Inlet to Jones Inlet, New York (Continuing)

LOCATION: Fire Island Inlet is located approximately 40 miles East of the Battery in New York City. The material dredged from the inlet will be placed in the vicinity of Gilgo Beach which lies along the Atlantic Ocean Shoreline of New York State in Suffolk County. The beach is located approximately 6 miles west of Fire Island and extends 14,000 feet to the westerly end of Gilgo Beach.

DESCRIPTION: The project is a multi-purpose beach erosion control and navigation project. The recommended plan of action is the continuation of construction of the authorized combined purpose project because of serious erosion problems threatening the shoreline. This involves placing approximately 1,000,000 cubic yards of sand every two years, from the inlet, along Gilgo Beach to serve as a feeder beach for the area. All work is programmed.

AUTHORIZATION: 1958 Rivers and Harbors Act and 1962 Rivers and Harbors Act, as amended by section 506(b)(5) of the Water Resources Development Act of 1996.

REMAINING BENEFITS-REMAINING COST RATIO: 2.2 to 1 at 3 1/4 percent.

TOTAL BENEFIT-COST RATIO: 2.2 to 1 at 3 1/4 percent.

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 3 1/4 percent (FY 1970).

BASIS OF BENEFITS-COST RATIO: Operations and Maintenance Proposal for Fire Island Inlet, dated October 1991 at October 1991 price levels.

SUMMARIZED FINANCIAL DATA:			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		241,600,000		Periodic Nourishment	17	TBD
Initial Construction	9,300,000					
Periodic Nourishment	232,300,000					
Estimated Non-Federal Cost		79,900,000				
Initial Construction	3,100,000					
Cash Contributions	3,100,000					
Other Costs	0					
Periodic Nourishment	76,800,000					
Cash Contributions	76,800,000					
Other Costs	0					
Total Estimated Project Cost		321,500,000				
Initial Construction	12,400,000					
Periodic Nourishment	309,100,000					

PHYSICAL DATA

The project consists of providing a navigation channel and hydraulically placing the dredged material which is 90 percent sand along the shoreline in the vicinity of Gilgo Beach, New York

Allocations to 30 September 2002	40,808,000
Conference Allowance for FY 2003	TBD
Allocations for FY 2003	TBD
Allocation through FY 2003	TBD
Allocation Requested for FY 2004	2,700,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2004	0

JUSTIFICATION: Construction of the authorized combined purpose project will alleviate serious erosion problems threatening the shoreline. Loss of sand due to lack of bypassing has resulted in a serious erosion problem at Gilgo Beach which is threatening the shoreline which protects a state highway and the Suffolk Counts sewer outfall. The situation has already resulted in two critical areas, and is projected to result in more critical areas in the foreseeable future if erosion is not arrested. Sand from the combined project will ensure adequate protection against continued shoreline erosion. Average annual benefits are as follows:

Annual Benefits	Amount
Shoreline Protection	$ 2,500,000
Road Protection	3,400,000
Protection to Outfall	63,000
Total	$ 5,963,000

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Contract 7	2,451,000
Planning, Engineering, and Design	19,000
Construction Management	230,000
Total	$ 2,700,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance and Replacement Costs
Pay 35 percent of the periodic nourishment cost and dredged material disposal	$ 79,900,000	
Total Non-Federal Costs	$ 79,900,000	$ 0

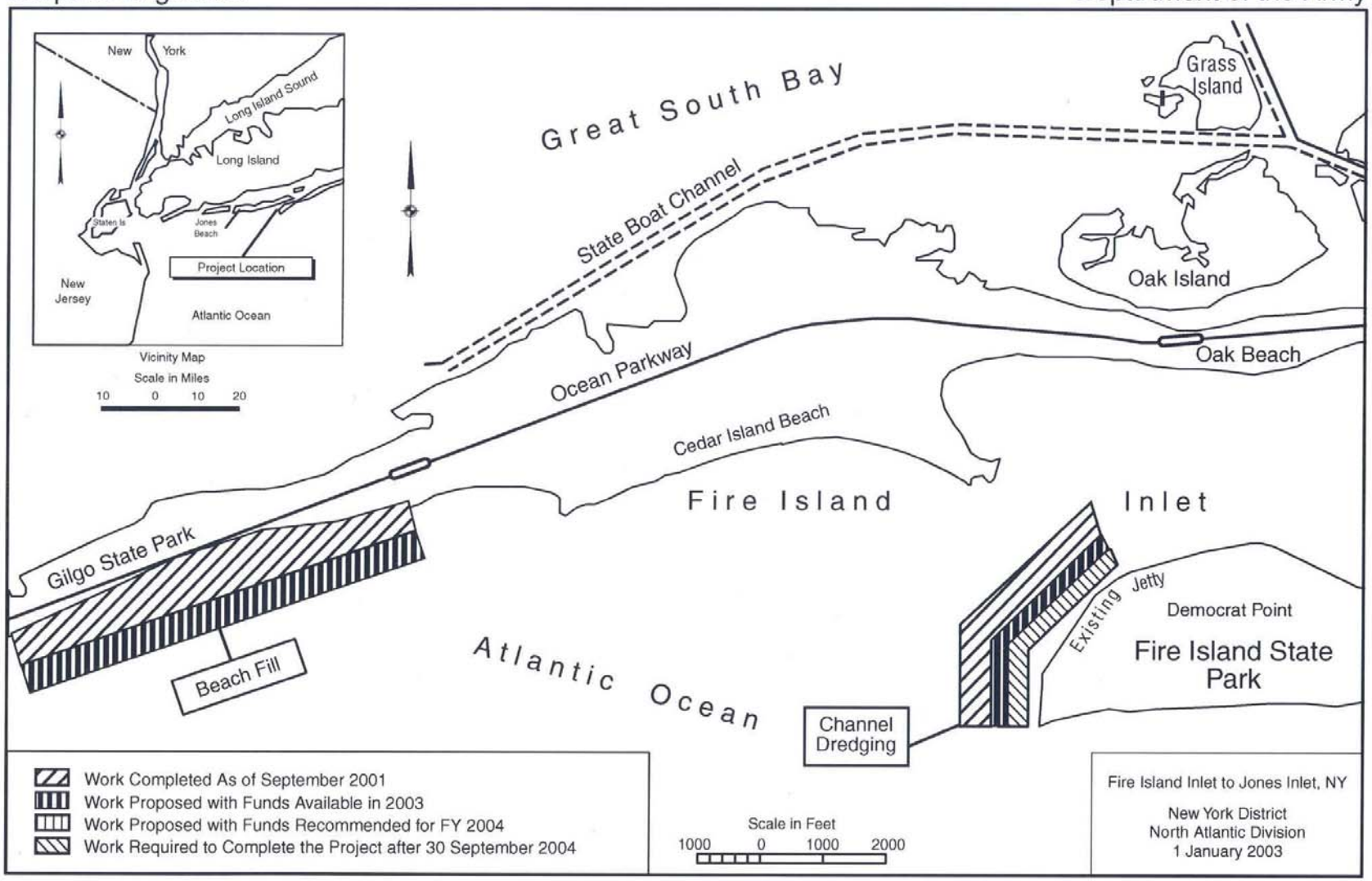
STATUS OF LOCAL COOPERATION: The non-Federal sponsor for this project is the New York State Department of Environmental Conservation. In accordance with paragraph 1.a (2) of the agreement between the United States of America and the State of New York, signed on 19 June 1973, for local cooperation at Fire Island Inlet & Shore Westerly to Jones Inlet, New York, the non-Federal sponsor is responsible for 17.4 percent of the periodic nourishment cost of the basic project, presently estimated at $600,000 annually. The nourishment cycle is anticipated to occur every two years.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $241,600,000 is an increase of $3,600,000 from the latest estimate ($238,000,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 3,600,000
Total	$ 3,600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement was filed with the U.S. Department of Environmental Protection on 1 April 1987. A finding of No Significant Impacts was completed on 4 August 1987.

OTHER INFORMATION: Funds were appropriated to initiate construction in FY 1970. During the 1980's this project was undertaken utilizing offshore disposal for sand bypassing under operation and maintenance authority and funding. In March 1988, a plan was recommended for solving both the erosion and navigation needs of the area which is in conformance with the multipurpose project as formulated in the authorizing document and subsequently developed in the General Design Memorandum. The proposed plan was engineered to substantially reduce costs while still providing the required storm protection and the majority of navigation improvements benefits not currently accruing to the natural channel (single purpose project). The proposal which is in accordance with the authorizing document is to maintain a degree of safety to the vessels using the channel during the periods of high waves. Approximately 1,000,000 cubic yards of dredged sand will be hydraulically placed along the shoreline in the vicinity of Gilgo Beach, for shore protection purposes. The plan was approved by the Assistant secretary of the Army for Civil Works on 2 August 1988. The Administration is considering proposing changes to the cost share for shore protection projects.


New York
Long Island Sound
Long Island
Staten Is
Jones Beach
Project Location
New Jersey
Atlantic Ocean
Vicinity Map
Scale in Miles
10 0 10 20
Great South Bay
State Boat Channel
Grass Island
Oak Island
Ocean Parkway
Oak Beach
Cedar Island Beach
Fire Island Inlet
Gilgo State Park
Existing Jetty
Democrat Point
Fire Island State Park
Beach Fill
Atlantic Ocean
Channel Dredging
Work Completed As of September 2001
Work Proposed with Funds Available in 2003
Work Proposed with Funds Recommended for FY 2004
Work Required to Complete the Project after 30 September 2004
Scale in Feet
1000 0 1000 2000
Fire Island Inlet to Jones Inlet, NY
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Fire Island Inlet to Montauk Point, New York (Continuing)

LOCATION: The overall project area, extends from Fire Island Inlet easterly to Montauk Point along the Atlantic Coast of Suffolk County. The project is about 83 miles long and comprises about 70 percent of the total ocean frontage of Long Island. Fire Island Inlet is located about 50 miles by water East of the Battery, New York City.

DESCRIPTION: The project provides for beach erosion control and hurricane protection along five reaches of the Atlantic Coast of New York from Fire Island Inlet to Montauk Point. Work includes widening the beaches along the developed areas to a minimum width of 100 feet at an elevation of 14 feet above mean sea level and by raising dunes to an elevation of 20 feet above mean sea level from Fire Island Inlet to Hither Hills State Park and at Montauk and opposite Lake Montauk Harbor, supplemented by grass planting on the dunes, interior drainage structures, construction of up to 50 groins, and subsequent periodic beach nourishment. A reformulation study is underway to evaluate storm damage protection measures. An interim project at Westhampton Beach has been constructed prior to completion of an ongoing overall project reformulation effort. This interim project provides for 30 years of periodic nourishment to maintain a beach berm extending westwardly from Groin 15 to Moriches Inlet at an elevation of 9.5 feet above mean sea level backed by a dune with a height of +15 feet above msl. The Westhampton Beach Interim project also includes tapering of the existing westernmost two groins, construction of a new groin between groins 14 and 15, and beachfill as necessary within the existing groinfield to promote sand transport. A Breach Contingency Plan has been developed which permits closing of breaches of the barrier island with use of a pre-approved Project Cooperation Agreement format, provided that estimated breach costs are no greater than $5 million. Studies are also underway for potential interim project to protect the area of west of Shinnecock Inlet. The study for an interim project along Fire Island has been deferred due to the lack of a non-federal sponsor.

AUTHORIZATION: River and Harbor Act 14 July 1960, modified by the Water Resources Development Act of 1974, the Water Resources Development Act of 1986, and the Water Resources Development Act of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 2.6 to 1 at 2 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.6 to 1 at 2 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.6 to 1 at 2 5/8 percent (FY 1963).

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost			572,900,000
Programmed Construction		137,200,000	
Initial Construction	72,900,000		
Periodic Nourishment	64,300,000		
Unprogrammed Construction		435,700,000	
Initial Construction	109,300,000		
Periodic Nourishment	326,400,000		
Estimated Non-Federal Cost			311,400,000
Programmed Construction		76,900,000	
Initial Construction	12,400,000		
Cash Contributions	9,800,000		
Other Costs	2,600,000		
Periodic Nourishment	64,500,000		
Cash Contribution	64,500,000		
Other Costs	0		
Unprogrammed Construction		234,500,000	
Initial Construction	62,500,000		
Cash Contributions	52,150,000		
Other Costs	10,350,000		
Periodic Nourishment	172,000,000		
Cash Contribution	172,000,000		
Other Costs	0		
Total Estimated Programmed Construction		214,100,000	
Initial Construction	85,300,000		
Periodic Nourishment	128,800,000		

STATUS: (1 Jan 2003)	PERCENT COMPLETE	COMPLETION SCHEDULE
Reach 2		
11 groins	100	Oct 1966
4 groins	100	Nov 1970
8 groins	0	1/
Westhampton Interim	40	TBD
Initial Construction	100	Dec 1997
Periodic Nourishment	10	TBD
Balance of Reach	0	1/
Reach 4		
2 groins	100	Sep 1965
Beach Fill-18.4 mi.	0	1/
Balance of Project		
Dune/Beach Fill-39.7 mi.	0	1/
27 groins	0	1/
Reformulation Study	60	TBD
Studies for Interim Projects		
Fire Island	90	2/
West of Shinnecock	99	Jun 2002
Beach Contingency Plan	100	Jan 1996

1/ Schedule is dependent on the outcome of the Reformulation effort.

2/ Study terminated due to lack of a non-federal sponsor and unresolved environmental issues that will be addressed in the overall reformulation effort.

PHYSICAL DATA

Dunes and beach replenishment: 73,5 miles
Dunes: raise to elevation 20 feet above msl
Beaches: widen to a minimum of 100 ft.
Interior drainage structures: 3 gated culverts
Groins: 52
Periodic nourishment: 480,000 cubic yards/yr

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY

SUMMARIZED FINANCIAL DATA (Contd.)			ACCUM. PCT. OF EST. FED. COST
Total Estimated Unprogrammed Construction Cost			670,200,000
Initial Construction		171,800,000	
Periodic Nourishment		498,400,000	
Total Estimated Project Cost			884,300,000
Initial Construction	257,100,000		
Periodic Nourishment	627,200,000		
Allocations to 30 September 2002		63,167,000	
Conference Allowance for FY 2003		TBD	
Allocation for FY 2003		TBD	
Allocations Through FY 2003		TBD	
Allocation Requested for FY 2004		3,800,000	
Programmed Balance to Complete After FY 2004		TBD	
Unprogrammed Balance to Complete After FY 2004		426,800,000	

JUSTIFICATION: Erosion has seriously reduced the width of the shoreline in the study area with consequent exposure of the shore and the mainland to wave attack and inundation damages. A recurrence of the hurricane tide of record (September 1938) when 45 lives were lost, would cause inundation and wave damage estimated at $717,000,000 (April 1996 price levels). As a result of the 11 December 1992 storm, in the Westhampton area (Section 1B of Reach 2), over 200 residential structures were destroyed and two breaches of the barrier island occurred. Closure costs for these breaches in 1992 was approximately $6,600,000.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Reformulation Study	683,000
Westhampton Interim (post construction monitoring)	315,000
Continue West of Shinnecock construction	1,815,000
Continue Nourishment Contract # 2 (Westhampton Beach)	582,000
Planning, Engineering and Design (West of Shinnecock)	251,000
Construction Management	154,000
Total	$ 3,800,000

NON-FEDERAL COSTS: Local interests are required to bear 30 percent of the total project cost including periodic nourishment, for the Westhampton Interim project and 35 percent of the total project cost for the Reformulation project, which includes the value of lands, easements, and rights-of-way.

Requirements of Local Cooperation:	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Provide all lands, easements, and rights-of-way, and relocations.	$ 12,950,000	
Pay 30 percent of the first costs for the Westhampton Interim project and 35 percent of the first costs for the remainder of the project including creditable lands and easements and rights of way, and bear all costs of operation and maintenance and replacement of storm damage reduction facilities.	61,950,000	
Pay 35 percent of the periodic nourishment cost	236,500,000	
Total Non-Federal Costs	$311,400,000	$0

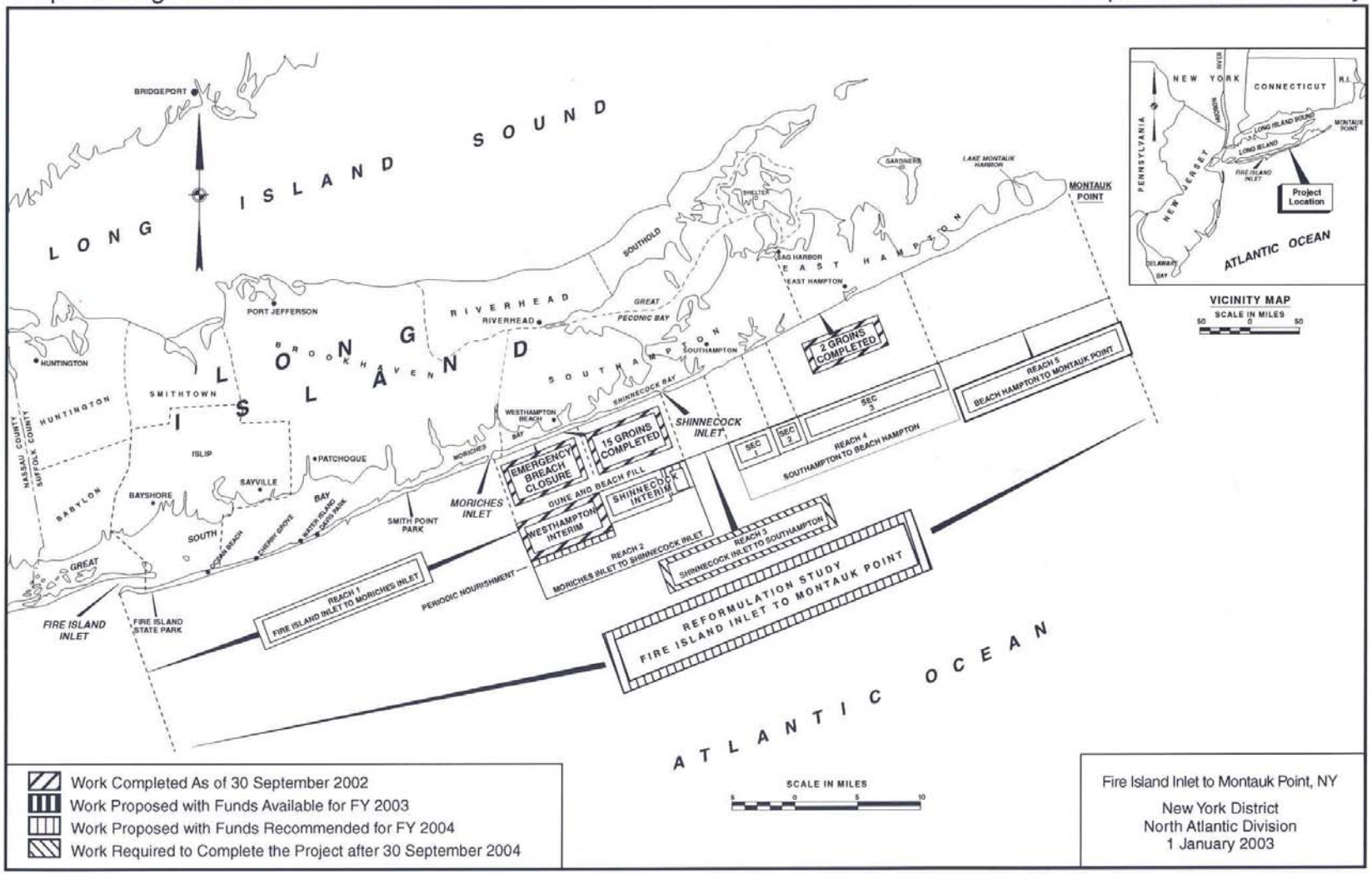
STATUS OF LOCAL COOPERATION: The agency responsible for local cooperation is the New York State Department of Environmental Conservation (NYSDEC). Assurances of local cooperation were executed by the NYSDEC on 14 August 1963 and accepted by the Federal Government on 20 August 1963. A project cooperation agreement (PCA) for the Westhampton Interim project was executed in February 1996. A PCA for the West of Shinnecock project is expected to be executed by April 2003.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $572,900,000 is an increase of $5,700,000 from the latest estimate ($567,200,000) presented to Congress (FY 2003). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 5,700,000
Total	$ 5,700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (USEPA) on 28 January 1978. On 7 March 1978, the Department of the Interior (DOI), supported by other agencies referred the EIS to the Council on Environmental Quality (CEQ) as unacceptable. Subsequent to the strong objections on the projects final environmental impact statement, meetings were held between September 1978 and January 1980 with DOI, USEPA, U.S. Department of Commerce, and NYSDEC. Two public scoping meetings were held in October 1979. Subsequently, the Federal agencies agreed to a basis for the reformulation of the Fire Island to Montauk Point project, including a general agreement on the studies necessary to answer the outstanding concerns. An environmental analysis was included in Supplement No. 2 to GDM No. 1 to determine environmentally acceptable measures of beach protection for the critically eroded areas at Westhampton Beach.

OTHER INFORMATION: Initial planning and construction funds were appropriated in FY 1963. The work remaining to be done is completion of construction of Reach 2-Moriches Inlet to Shinnecock Inlet, Reach 4-Southhampton to Beach Hampton, initiation of construction of Reach 1-Fire Island Inlet to Moriches Inlet, Reach 3-Shinnecock to Southhampton, and Reach 5-Beach Hampton to Montauk, as well as the completion of the reformulation effort. The Corps of Engineers concurred with the request by the State of New York to initially construct 11 groins (Reach 2), and 2 groins (Reach 4) with beach fill to be added as necessary but not sooner than 3 years after groin completion. In recognition of the critical condition of the beaches due to earlier storms, the Corps recommended to the State in June 1967 that the 3 year observation period be waived and that construction of urgent hurricane protection be resumed. The State concurred and requested that work be undertaken on additional groins, replacement of beach fill and dunes in Reach 2, as well as construction of groins, drainage structures and dune fill in Reach 4. Suffolk county, however, did not endorse the placement of beach and dune fills. Continuing negotiations during FY 1969 resulted in agreement on a plan for construction for certain groins, drainage structures, beach fill, and dunes to an interim height of 16 feet in Reaches 2 and 4. In December 1973, the State requested planning for Reach 2 (Section 1b), (Westhampton Beach) and Reach 4 (Georgica Pond), indicating that it would provide funds. Planning resumed and assurances were requested from the State in October 1974. However, strong opposition developed with Suffolk County and the county legislature refusing to provide support. Subsequently, erosion of the shoreline downdrift of the groin field at Westhampton Beach accelerated to the point where Dune Road, the only access to the homes in this area, was under water during normal high tide. In December 1992, two breaches occurred in the barrier island near Westhampton Beach, which were subsequently closed. An interim plan for the severely eroded Westhampton Beach area was prepared in June 1994, which provides for a lower level of protection than that provided in the original authorization. This interim plan has been designed such that it could be modified based on future recommendations in the to-be-completed Reformulation study. The USEPA and DOI agreed in concept to the interim plan, provided that a full environmental assessment and/or environmental impact study was completed, and the reformulation of the overall project was reinstated. The estimated cost of the reformulation effort is $24 million. The reformulation study schedule is being determined. In the interim, the planning engineering and design has been completed for an interim project to address the severely eroded shoreline west of Shinnecock Inlet. An interim plan for the Fire Island barrier island has been deferred due to the lack of a non-federal sponsor and environmental concerns, which will be addressed during the reformulation study. The cost of these interim studies is $4 million. Additionally, a Breach Contingency Plan was approved in January 1996 to provide for rapid response to breaches along the islands while awaiting completion of the reformulation study. The Administration is considering proposing changes to the cost share for shore protection projects.


LONG ISLAND SOUND
ATLANTIC OCEAN
BRIDGEPORT
PORT JEFFERSON
RIVERHEAD
SOUTHOLD
GREAT PECONIC BAY
SOUTHAMPTON
EAST HAMPTON
GARDINERS
LAKE MONTAUK HARBOR
MONTAUK POINT
SHELTER ISLAND
SAG HARBOR
HUNTINGTON
SMITHTOWN
BROOKHAVEN
ISLIP
BABYLON
NASSAU COUNTY
SUFFOLK COUNTY
PATCHOGUE
SAYVILLE
BAYSHORE
GREAT SOUTH BAY
OCEAN BEACH
CHERRY GROVE
FIRE ISLAND INLET
FIRE ISLAND STATE PARK
SMITH POINT PARK
MORICHES INLET
MORICHES BAY
WESTHAMPTON BEACH
SHINNECOCK BAY
SHINNECOCK INLET
2 GROINS COMPLETED
15 GROINS COMPLETED
EMERGENCY BREACH CLOSURE
DUNE AND BEACH FILL
WESTHAMPTON INTERIM
SHINNECOCK INTERIM
SEC 1
SEC 2
SEC 3
REACH 1
FIRE ISLAND INLET TO MORICHES INLET
REACH 2
MORICHES INLET TO SHINNECOCK INLET
REACH 3
SHINNECOCK INLET TO SOUTHAMPTON
REACH 4
SOUTHAMPTON TO BEACH HAMPTON
REACH 5
BEACH HAMPTON TO MONTAUK POINT
REFORMULATION STUDY
FIRE ISLAND INLET TO MONTAUK POINT
PERIODIC NOURISHMENT
SCALE IN MILES
5 0 5 10
NEW YORK
CONNECTICUT
R.I.
PENNSYLVANIA
NEW JERSEY
DELAWARE BAY
HUDSON
LONG ISLAND SOUND
LONG ISLAND
MONTAUK POINT
FIRE ISLAND INLET
Project Location
ATLANTIC OCEAN
VICINITY MAP
SCALE IN MILES
50 0 50
Work Completed As of 30 September 2002
Work Proposed with Funds Available for FY 2003
Work Proposed with Funds Recommended for FY 2004
Work Required to Complete the Project after 30 September 2004
Fire Island Inlet to Montauk Point, NY
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Virginia Beach, Virginia (Hurricane Protection) (Continuing)

LOCATION: The city of Virginia Beach is located on the eastern coast of Virginia bordered by the Atlantic Ocean on the east, Chesapeake Bay on the north, the cities of Norfolk and Chesapeake on the west, and North Carolina on the south.

DESCRIPTION: The plan of improvement includes construction of a vertical steel sheet-pile wall with concrete cap extending from Rudee Inlet to 58th Street, enhancement of the existing dune system between 58th Street and 89th Street, construction and periodic renourishment of a widened and raised beach berm between Rudee Inlet and 89th Street, a new boardwalk integrated with the vertical wall and placed over the existing boardwalk extending from Rudee Inlet to approximately 40th Street, a storm water runoff system consisting of the offshore discharge by pumped flow through submarine pipelines, appropriate beach access structures consisting of ramps and stairs and dune crossover facilities.

AUTHORIZATION: The project is authorized for construction by the Water Resources Development Act of 1986, as modified by the Water Resources Development Acts of 1992 and 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8 percent

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 8 percent

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 8 percent (FY 1996)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in July 1994 at October 1993 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED COST
Estimated Federal Cost		247,000,000	
Initial Construction	85,000,000		
Periodic Nourishment	162,000,000		
Estimated Non-Federal Cost		133,000,000	
Initial Construction	35,989,000		
Cash Contributions	35,876,000		
Other Costs	113,000		
Periodic Nourishment	97,011,000		
Cash Contributions	97,011,000		
Other Costs	0		
Total Estimated Project Cost		380,000,000	
Initial Construction	102,825,000		
Periodic Nourishment	277,175,000		
Allocations to 30 September 2002		82,256,000	
Conference Allowance for FY 2003		TBD	
Allocation for FY 2003		TBD	
Allocations through FY 2003		TBD	
Allocation Requested for FY 2004		2,294,000	
Programmed Balance to Complete after FY 2004		TBD	
Unprogrammed Balance to Complete after FY 2004		0	

STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Initial construction	90	Oct 2003
Periodic nourishment	0	TBD
Entire Project	21	TBD

PHYSICAL DATA

Approximately 20,600 LF of vertical sheet-pile seawall with concrete cap between Rudee Inlet and 58th Street which will be integrated into a new boardwalk between Rudee Inlet and 40th Street, enhanced dune system between 58th and 89th Street at elevation 18 ft NGVD and 25 ft crest width, beach berm between Rudee Inlet and 89th Street at elevation 9 ft NGVD and 100 ft crest width, pumped ocean discharge drainage system. Periodic nourishment of beach berm between Rudee Inlet and 89th Street (6.2 miles) 50-year project life.

Division: North Atlantic District: Norfolk Virginia Beach, VA (Hurricane Protection)

JUSTIFICATION: The major problem along the Virginia Beach coastline is the vulnerability of portions of the beach and adjacent development to direct wave attacks during major storms and hurricanes. The most severe hurricane to affect the Virginia Beach area was that of August 1933 where tidal heights reached approximately 9 ft NGVD. In March 1962, a severe northeastern storm caused breaching and failing of bulkheads and dunes, and severe erosion along the beachfront resulting in damages of approximately $9,000,000 (March 1962 price level) to the Virginia Beach area. Although the 1933 hurricane was of greater magnitude, the damaging effect of the 1962 northeaster was the greatest of any storm in the area due to the increased development along the shoreline between 1933 and 1962 and the duration of the storm over several high tides. Without a storm protection project, damages to commercial, residential and public developments and to existing protective works along the Atlantic Ocean between Rudee Inlet and 89th Street are estimated at $106 million at 1993 price levels for a repeat of the August 1933 hurricane and $64 million for a repeat of the March 1962 storm. The average annual benefits amount to $13,853,000 for storm damage reduction based on October 1993 price levels.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Periodic Nourishment	$ 2,294,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 113,000	
Pay 35 percent of the costs allocated to hurricane and storm damage reduction, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hurricane and storm damage reduction facilities.	35,876,000	$1,528,000
Pay 35 percent of the cost of periodic nourishment.	97,011,000	
Total Non-Federal Costs	$133,000,000	$1,528,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction

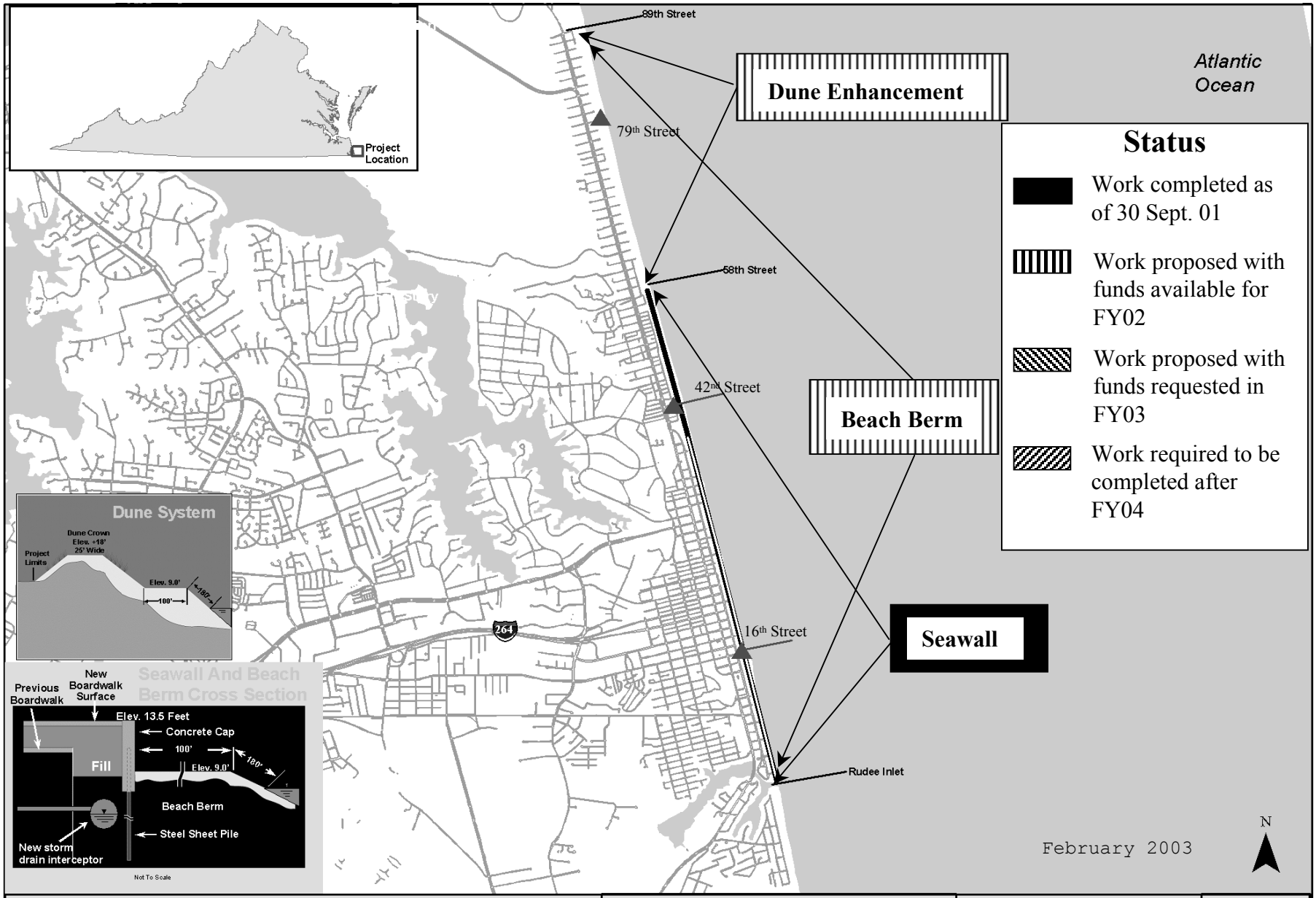
Division: North Atlantic District: Norfolk Virginia Beach, VA (Hurricane Protection)

STATUS OF LOCAL COOPERATION: The city of Virginia Beach, Virginia is the local sponsor. The city has indicated their support for the recommended project and signed the PCA on 27 June 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $247,000,000 is the same as the latest estimate ($247,000,000) presented to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (FEIS) was filed with the Presidents Council on Environmental Quality (CEQ) on 19 September 1972 and a supplement was issued on 22 February 1985. An Environmental Assessment was completed and a Finding of No Significant Impact (FONSI) was signed in May 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction funds were appropriated in the FY 1996. The Administration is considering proposing changes to the cost share for shore protection projects.



Virginia Beach, Virginia (Hurricane Protection) Work Completed, In Progress & Proposed Beach Erosion Control

Legend

Outfalls (2000')
Pumpstations
Boardwalk
Seawall
Roads

1 inch = 2,500 feet

0 1,250 2,500 5,000 Feet

US Army Corps of Engineers
Norfolk District

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Passaic River Preservation of Natural Storage Areas, New Jersey (Continuing)

LOCATION: The project is located in Morris, Essex and Passaic Counties, New Jersey

DESCRIPTION: This project element involves the acquisition of 5,350 acres of natural floodplain storage areas in the Central Passaic River Basin to preserve them from future development. This measure is a flood damage reduction element that will prevent increases in flood flows that would be caused by the loss of these areas to new development. This acquisition, in conjunction with nearly 16,000 acres already protected under existing Federal and State programs, will help preserve the flood storage and environmental characteristics of the Central Basin wetlands.

AUTHORIZATION: Water Resources Development Act of 1990, Section 101(a)(18) as modified by Section 102(p) of WRDA 1992, Section 333 of WRDA 1996, and Section 327 of WRDA 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 7 3/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Benefits and costs are from the Final General Design Memorandum dated July 1996 at October 1994 price levels, approved 30 October 1996 and updated in FY 1998.

SUMMARIZED FINANCIAL DATA	ACCUM. PCT. OF EST. FED. COST
Estimated Federal Cost	20,400,000
Estimated Non-Federal Cost	1,700,000
Total Estimated Project Cost	22,100,000
Allocations to 30 September 2002	7,542,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocation through FY 2003	TBD
Allocation Requested for FY 2004	1,000,000
Programmed Balance to Complete After FY 2004	TBD
Unprogrammed Balance to Complete After FY 2004	0

STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	20	TBD

PHYSICAL DATA

Nonstructural Flood Control: Acquisition of approximately 5,350 acres of natural floodplain storage areas in the Passaic River Basin

Division: North Atlantic District: New York Passaic River Preservation of Natural Storage Areas, NJ

JUSTIFICATION: The Passaic River Basin suffers average annual damages of $116,016,000 (Oct. 1994 price levels). Properties experiencing damage include residential, commercial, industrial, public and municipal facilities. There are approximately 19,500 structures in the 100-year floodplain. The most severe recent flood occurred in April 1984, claiming 3 lives, with damages estimated at $493,000,000. The entire basin, or portions thereof, was declared a disaster area in 1968, 1971, 1972, 1973, twice in 1975 1984, and 1992. The recurrence of the October 1903 flood of record would cause damages of $2,492,000,000. The project does not support development of the floodplain directly or indirectly. Of the 5,350 acres to be acquired, approximately 5,200 are wetlands. The acquisition of the natural storage areas, in conjunction with maintenance of the existing floodways in acquisition areas, would maintain the environmental characteristics of the basin by preserving wetlands, open space and fish and wildlife habitats. Average annual benefits (Inundation Reduction) are $1,826,300.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Acquisitions	$ 900,000
Construction Management	100,000
Total	$1,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation:	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Lands already acquired by sponsor for project and to be maintained with project cooperation agreement.	$ 1,700,000	$ 228,000
Pay 25 percent of the costs allocated to flood control to to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsors ability to pay, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities. Credits as per WRDA 1990/92 will reduce Non-Federal cash share by $3,825,000 from $3,825,000 to $0	$ 0	$ 0
Total non-Federal Costs	$ 1,700,000	$ 228,000

Division: North Atlantic District: New York Passaic River Preservation of Natural Storage Areas, NJ

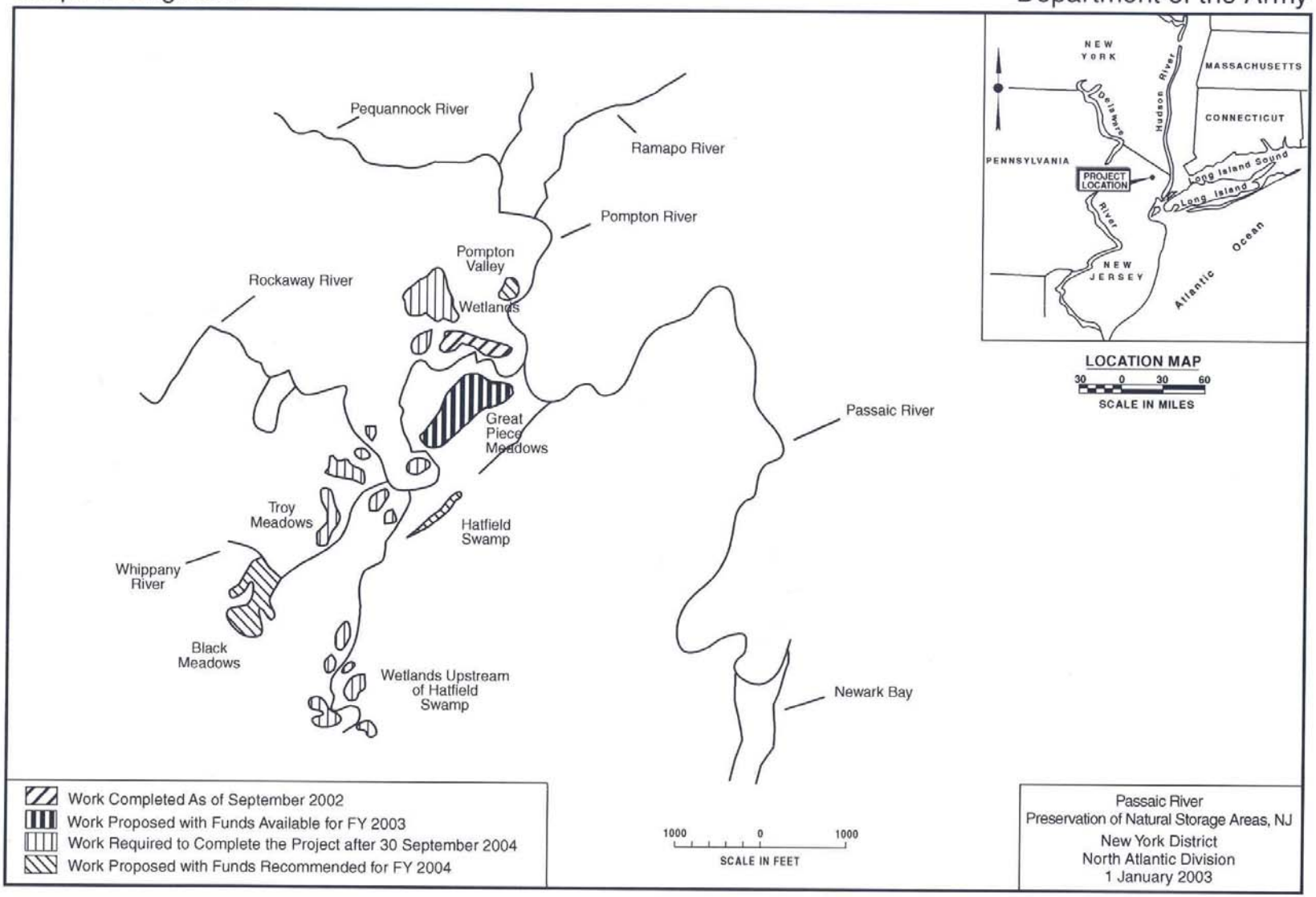
STATUS OF LOCAL COOPERATION: The State of New Jersey, through its Department of Environmental Protection (NJDEP), is the non-Federal sponsor. The PCA was executed in June 1999.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $20,400,000 is a decrease of $100,000 from the latest estimate ($20,500,000) presented to Congress (FY 2003). The change includes the following item:

Item	Amount
Price Escalation on Construction Features	-$600,000
Other Estimating Adjustments	$500,000
Total	-$100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The FEIS was filed with EPA on 17 January 1989 and the SEIS with EPA on 20 October 1995 (Note: the SEIS addresses changes to other project elements. No changes have occurred to the Preservation element).

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1998. The Preservation of Natural Floodplain Storage has been determined to be a separable element of the overall Passaic River Flood Damage Reduction Project which can be implemented without adverse impact anywhere in the basin.


Corps of Engineers
Department of the Army
Pequannock River
Ramapo River
Pompton River
Pompton Valley Wetlands
Rockaway River
Great Piece Meadows
Passaic River
Troy Meadows
Hatfield Swamp
Whippany River
Black Meadows
Wetlands Upstream of Hatfield Swamp
Newark Bay
NEW YORK
MASSACHUSETTS
CONNECTICUT
PENNSYLVANIA
NEW JERSEY
Delaware River
Hudson River
Long Island Sound
Long Island
Atlantic Ocean
PROJECT LOCATION
LOCATION MAP
30 0 30 60
SCALE IN MILES
Work Completed As of September 2002
Work Proposed with Funds Available for FY 2003
Work Required to Complete the Project after 30 September 2004
Work Proposed with Funds Recommended for FY 2004
1000 0 1000
SCALE IN FEET
Passaic River
Preservation of Natural Storage Areas, NJ
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General - Flood Control

PROJECT: Raritan River Basin, Green Brook Sub-Basin, New Jersey (Continuing)

LOCATION: The Green Brook Sub-Basin project area is located within the Raritan River Basin in north-central New Jersey in Middlesex, Somerset and Union Counties. It drains approximately 65 square miles of primarily urban and industrialized area. It includes the following communities: Dunellen, Middlesex Borough, Piscataway, South Plainfield, Bound Brook, Bridgewater, Green Brook, North Plainfield, Warren, Watchung, Berkeley Heights, Plainfield, and Scotch Plains. The project area is divided into three sub-areas: the lower, upper and Stony Brook portions of the sub-basin.

DESCRIPTION: The NED plan consists of a system of levees and floodwalls in the lower portion of the basin, channel modifications and dry detention basins in the upper portion of the basin, and channel modifications in the Stony Brook portion of the sub-basin. The recommended plan consists of levees and floodwalls in the lower portion of the basin and channel modifications in the Stony Brook portion of the sub-basin. The upper portion of the sub-basin has been deferred.

AUTHORIZATION: Water Development Act of 1986.

REMAINING BENEFITS-REMAINING COST RATIO: 1.3 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Benefits are from the analysis contained in the Final General Reevaluation Report dated May 1997 at April 1996 price levels.

SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost		309,400,000
Programmed Construction	263,200,000	
Unprogrammed Construction	46,200,000	
Estimated Non-Federal Cost		104,000,000
Programmed Construction	87,700,000	
Cash Contributions	25,500,000	
Other Costs	62,200,000	
Unprogrammed Construction	16,300,000	
Cash Contributions	3,100,000	
Other Costs	13,200,000	
Total Estimated Programmed Construction Cost		350,900,000
Total Estimated Unprogrammed Construction Cost		62,500,000
Total Estimated Project Cost		413,400,000
Allocations to 30 September 2002		43,374,000
Conference Allowance for FY 2003		TBD
Allocation for FY 2003		TBD
Allocations through FY 2003		TBD
Allocation Requested for 2004		6,488,000
Programmed Balance to complete after FY 2004		TBD
Unprogrammed Balance to complete after FY 2004		46,200,000

ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
	Element 1	0	TBD
	Element 2,5	0	Indefinite
	Elements 3,4,6,7	0	TBD
	Entire Project	0	Indefinite

PHYSICAL DATA

Element 1 is located in Bound Brook Borough and western Middlesex Borough. It consists of levees, floodwalls, closure structures, interior drainage facilities, a bridge reconstruction and non-structural measures including flood proofing and buyouts. Element 2,5(Unprogrammed) consists of channel modifications and two dry detention basins. Elements 3,4,6,7 will consist of levees, floodwalls, closure structures, bridge reconstruction and non-structural measures including floodproofing and buyouts.

JUSTIFICATION: The project area suffers annual flood damages of $41,000,000 (Apr 96 P.L.) without the project. On August 28, 1971 Hurricane Doria caused $85,200,000 in damages (Oct 95 P.L.). Another major storm occurred on August 2, 1973 which caused $89,300,000 in damages (Oct 95 P.L.). Flooding was so extensive that the area was designated a Major Disaster Area. Six deaths were attributed to this storm, thirty four people were injured and there were more than 1,000 people evacuated from their residences. Average annual benefits, all flood control, are $37,773,000 (April 1996 price level)

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Construction of 1st Construction Element	$ 5,988,000
Construction Management	500,000
Total	$ 6,488,000

Division: North Atlantic District: New York Raritan River Basin, Green Brook Sub-Basin, NJ

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, relocations and borrow excavated or dredged material disposal areas.	$ 62,200,000	
Pay 25 percent of cost associated with non-structural flood protection	16,300,000	
Pay 6 percent of the costs allocated to flood control, to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986,and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	25,500,000	$1,157,000
Total Non-Federal Costs	$104,000,000	$1,157,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The State of New Jersey Department of Environmental Protection, provided a letter dated 17 April 1997 stating their support and endorsement of the project. Governor Whitman also provided a letter of support on 26 February 1998. The Green Brook Flood Control Commission has stated their strong support for the project in a letter dated 4 October 1995. Also, several counties and municipalities have adopted resolutions endorsing and supporting the project. The Project Cooperation Agreement was executed in June 1999.

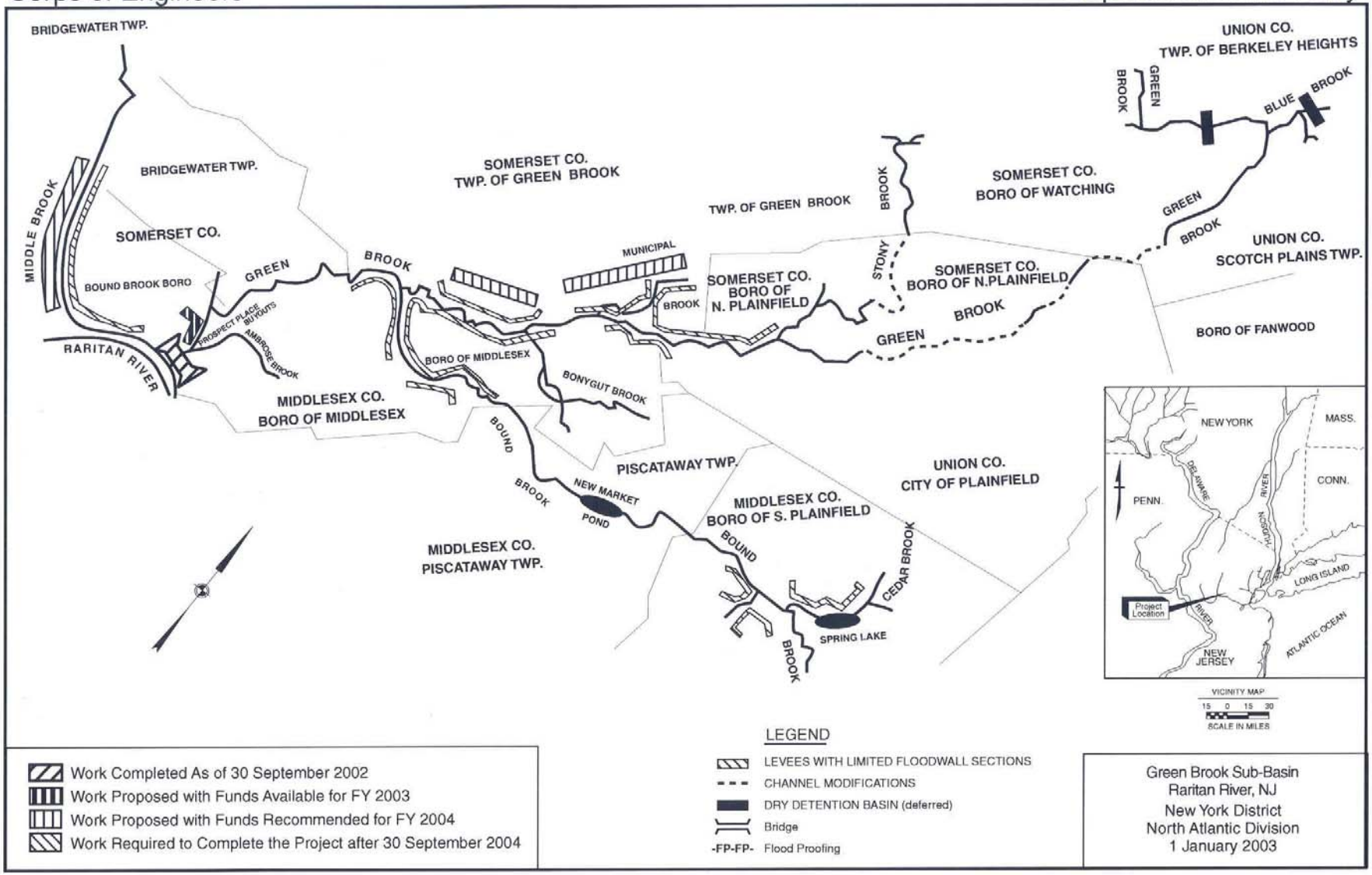
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $309,400,000 is a decrease of $10,100,000 from the latest estimate ($319,500,000) presented to Congress (FY 2003). The change includes the following item:

ITEM	AMOUNT
Price Escalation on Construction Features	-$ 10,100,000
Total	-$ 10,100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed in August 1980. A Supplemental Environmental Impact Statement with the Final General Reevaluation Report was released in May 1997 and the Record of Decision was issued in July 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 1998.

Division: North Atlantic District: New York Raritan River Basin, Green Brook Sub-Basin, NJ


BRIDGEWATER TWP.
BRIDGEWATER TWP.
SOMERSET CO.
MIDDLE BROOK
BOUND BROOK BORO
GREEN BROOK
PROSPECT PLACE BUTGUTS
AMBROSE BROOK
RARITAN RIVER
SOMERSET CO.
TWP. OF GREEN BROOK
MUNICIPAL BROOK
BORO OF MIDDLESEX
MIDDLESEX CO.
BORO OF MIDDLESEX
BONYGUT BROOK
BOUND BROOK
NEW MARKET POND
PISCATAWAY TWP.
MIDDLESEX CO.
PISCATAWAY TWP.
TWP. OF GREEN BROOK
SOMERSET CO.
BORO OF N. PLAINFIELD
STONY BROOK
SOMERSET CO.
BORO OF WATCHING
SOMERSET CO.
BORO OF N.PLAINFIELD
GREEN BROOK
UNION CO.
TWP. OF BERKELEY HEIGHTS
GREEN BROOK
BLUE BROOK
UNION CO.
SCOTCH PLAINS TWP.
BORO OF FANWOOD
UNION CO.
CITY OF PLAINFIELD
MIDDLESEX CO.
BORO OF S. PLAINFIELD
CEDAR BROOK
SPRING LAKE
BROOK
NEW YORK
MASS.
CONN.
PENN.
DELAWARE RIVER
HUDSON
LONG ISLAND
Project Location
NEW JERSEY
ATLANTIC OCEAN
VICINITY MAP
15 0 15 30
SCALE IN MILES
LEGEND
LEVEES WITH LIMITED FLOODWALL SECTIONS
CHANNEL MODIFICATIONS
DRY DETENTION BASIN (deferred)
Bridge
-FP-FP- Flood Proofing
Work Completed As of 30 September 2002
Work Proposed with Funds Available for FY 2003
Work Proposed with Funds Recommended for FY 2004
Work Required to Complete the Project after 30 September 2004
Green Brook Sub-Basin
Raritan River, NJ
New York District
North Atlantic Division
1 January 2003

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Wyoming Valley, Pennsylvania (Levee Raising) (Continuing)

LOCATION: Wyoming Valley is located in northeastern Pennsylvania and extends from Duryea on the Lackawanna River southwestward to Nanticoke on the Susquehanna River. The Wyoming Valley flood control projects are located on the Susquehanna River in Luzerne County and are the four contiguous existing Federal flood control projects at Plymouth, Kingston-Edwardsville, Swoyersville-Forty Fort, and Wilkes-Barre and Hanover Township, which together function as a flood control system within the Valley.

DESCRIPTION: The four existing Federal flood control projects in the Wyoming Valley were designed to protect against a flood equal to the March 1936 event which had a peak flow of 232,000 cubic feet per second. Modifications to the existing project would protect against flood flows of 318,500 cubic feet per second that would be caused by a recurrence of Storm Agnes. The proposed modifications include raising existing levees and floodwalls between 3 and 5 feet, modifying closure structures, relocating utilities, and providing some new floodwalls and levees to maintain the integrity of the flood control system. The proposed project also includes a plan to reduce project-related adverse impacts. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 and the Water Resources Development of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because project construction is substantially complete.

TOTAL BENEFIT - COST RATIO: Not applicable because project construction is substantially complete.

INITIAL BENEFIT - COST RATIO: 2.8 to 1 at 8 1/4 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Benefits are from the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$131,000,000				
Estimated Non-Federal Cost:		44,000,000		Levee Raising	100	Jan 2003
Cash Contributions	$33,538,000			Entire Project	68	TBD
Other Costs	10,462,000					
Total Estimated Project Cost		$175,000,000				

Division: North Atlantic District: Baltimore Wyoming Valley, PA (Levee Raising)

SUMMARIZED FINANCIAL DATA:(CONT'D)

Allocations to 30 September 2002	87,112,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocations through FY 2003	TBD
Allocation Requested for FY 2004	10,021,000
Programmed Balance to after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2004	TBD

PHYSICAL DATA

Swoyersville-Forty Fort

Completed Work	Raising Work
Levees - Earthfill: 16,970 ft. Floodwall - Steel sheetpile: 2,490 ft. Channel - 3,900 ft.	Levees - Earthfill: 16,500 ft. x 3-5 ft. Floodwall - Steel sheetpile: 4,000 ft. x 3-5 ft.

Plymouth

Completed Work	Raising Work
Levees - Earthfill: 8,700 ft. Channel - 2,670 ft. Pump Stations - 2	Levees - 8,600 ft. x 2-4 ft. Floodwall - Concrete: 200 ft. x 2-4 ft. Steel sheetpile: 200 ft. x 2-4 ft. Earth: 500 ft. x 2-4 ft. Pump Station Modification- 2

Kingston-Edwardsville

Completed Work	Raising Work
Levees - Earthfill: 18,430 ft. Conduit - 16.5 ft. x 6,660 ft. Channel - 3,640 ft. Pump Stations - 3	Levees - Earthfill: 17,300 ft. x 3-5 ft. Floodwall - Concrete: 500 ft. x 3-5 ft. Earth: 500 ft. x 3-5 ft. Closures - 3 new Pump Station Modifications - 3

Wilkes-Barre and Hanover Township

Completed Work	Raising Work
Levees - Earthfill: 27,860 ft. Floodwall - Concrete: 160 ft. Pump Stations - 5 stormwater 8 sanitary Channel - 1,000 ft.	Levees - Earthfill: 20,600 ft. x 3-5 ft. Floodwall - Concrete: 500 ft. x 3-5 ft. Sheetpile 4,300 ft. x 3-5 ft. Earth: 600 ft. x 3-5 ft. Closures - 3 new & 1 modified Pump Station Modification - 13

JUSTIFICATION: The four existing local protection projects which comprise the Wyoming Valley system were constructed between 1935 and 1976 and provide protection for an area of 5,160 acres and a population of 225,000. Over the past 200 years at least 32 floods have been recorded which exceeded a stage of 25 feet at Wilkes-Barre compared to the flood stage of 22 feet. The discharge of 345,000 cubic feet per second during June 1972 (Storm Agnes) without the now completed Cowanesque and Tioga-Hammond Lakes projects in operation overtopped the protection and resulted in the greatest flood of record with damages of $730,000,000. A recurrence of Storm Agnes would result in damages to about 25,000 structures with an estimated value of about $4 billion (October 1997 price level). In January 1996, a combination of rainfall and snowmelt resulted in a flood stage of about 34 feet at Wilkes-Barre, PA. Although the existing system prevented flood damages of nearly $500 million, residual damages were estimated at about $6 million in the Wyoming Valley area. The average annual benefits amount to $27,143,000 essentially all for flood control, based on the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Non-Structural Mitigation Measures	3,021,000
Continue modifications to relief culverts and other modifications to the original project	6,000,000
Construction Management	1,000,000
Total	$ 10,021,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way.	4,272,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	6,190,000	
Pay 18 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance and replacement of flood control facilities.	31,735,000	170,000
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	1,803,000	38,000
Total Non-Federal Costs	$44,000,000	$208,000

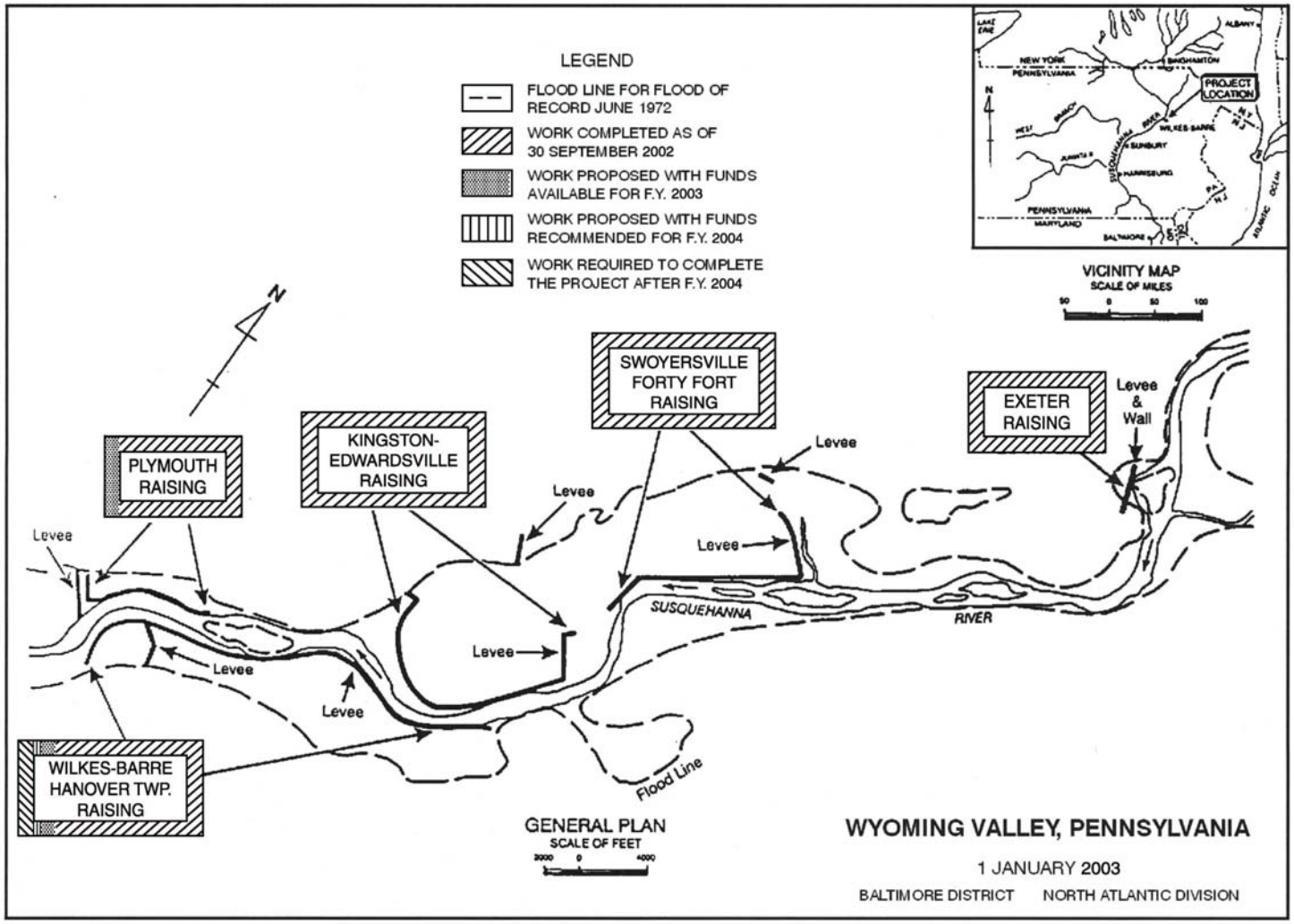
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the Luzerne County Flood Protection Authority. The Pennsylvania Department of Environmental Protection has committed to provide 45 percent of the non-Federal share of project costs. Letters of intent to provide the required local cooperation requirements were furnished by Luzerne County (19 January 1995) and the Commonwealth of Pennsylvania (30 December 1994). A Project Cooperation Agreement was executed in October 1996. To date, the County has fully complied with the local requirements on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $131,000,000 is the same as the latest estimate ($131,000,000) presented to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Supplemental Environmental Impact Statement is included in the final General Design Memorandum approved February 1996. The Record of Decision was signed 24 June 1996.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984, and funds to initiate construction were appropriated in FY 1995.

Division: North Atlantic District: Baltimore Wyoming Valley, PA (Levee Raising)


LEGEND
FLOOD LINE FOR FLOOD OF RECORD JUNE 1972
WORK COMPLETED AS OF 30 SEPTEMBER 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR F.Y. 2003
WORK PROPOSED WITH FUNDS RECOMMENDED FOR F.Y. 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2004
VICINITY MAP
SCALE OF MILES
PROJECT LOCATION
NEW YORK
PENNSYLVANIA
WILKES-BARRE
SUNBURY
HARRISBURG
PENNSYLVANIA
MARYLAND
BALTIMORE
N
PLYMOUTH RAISING
KINGSTON-EDWARDSVILLE RAISING
SWOYERSVILLE FORTY FORT RAISING
EXETER RAISING
Levee & Wall
WILKES-BARRE HANOVER TWP. RAISING
Levee
SUSQUEHANNA RIVER
Flood Line
GENERAL PLAN
SCALE OF FEET
WYOMING VALLEY, PENNSYLVANIA
1 JANUARY 2003
BALTIMORE DISTRICT NORTH ATLANTIC DIVISION

APPROPRIATION TITLE: Construction, General - Environmental Restoration

PROJECT: Chesapeake Bay Oyster Recovery, Maryland & Virginia (Continuing)

LOCATION: The Chesapeake Bay in Maryland & Virginia

DESCRIPTION: The project will contribute to multi-agency and private efforts to restore oyster populations in the Chesapeake Bay. Project elements include: construction or rehabilitation of oyster reefs to create sanctuary and harvestable oyster habitats; construction of hatchery and seed bar facilities for production and collection of disease-free oyster seed or "spat"; planting spat and brood-stock oysters in locations which best foster oyster reproduction and health; and monitoring the performance of the project to increase oyster populations.

AUTHORIZATION: Water Resources Development Act of 1986, as amended by Section 505 of WRDA '96 and Section 342 of WRDA '00 and Section 113 of the Energy and Water Appropriation Act of 2002.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA			ACCUM PCT. OF EST. FED COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		20,000,000				
Estimated Non-Federal Cost:		6,667,000		Entire Project	40	TBD
Cash Contributions	$ 0					
Other Costs	$6,667,000					
Total Estimated Project Cost		$26,667,000				

SUMMARIZED FINANCIAL DATA: (CONT'D)	
Allocations to 30 September 2002	6,567,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocations through FY 2003	TBD
Allocation Requested for FY 2004	3,000,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed Balance to Complete after FY 2004	TBD

PHYSICAL DATA	
New oyster bars constructed	2000 acres
Existing oyster bars rehabilitated	135 acres
Seed bars created	100 acres
Oyster seed production	
Hatchery Spat transplanted -	500 million
Natural Spat transplanted –	100,000 bushels

JUSTIFICATION: The Chesapeake Bay oyster population has declined dramatically since the turn of the century, largely due to the parasitic diseases, MSX, Dermo, and overharvesting. These diseases kill oysters before they reach maturity and marketable size. As a result, there has been a collapse in the oyster industry, with the 1995 harvest equating to less than one percent of the harvest 100 years ago. More significantly, the reduced oyster population has adversely impacted water quality in the Bay, due to the smaller size and numbers of oyster beds to filter and clean the water. Activities to restore physical oyster habitat and maintain water quality are critical to the economic and environmental survival of the Chesapeake Bay. Restoration of oyster populations in the bay is a high priority of the State of Maryland, the Commonwealth of Virginia, and the Chesapeake Bay Program. Currently, there is a Chesapeake Bay goal to increase oyster habitat 10-fold by 2010. The project will help implement recommendations in the June 1999 scientific consensus document on Chesapeake Bay oyster restoration. As part of this project, the Corps will develop a long-term master plan to document the Corps' role in these recommendations.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Fish and Wildlife Facilities:	
Maryland	1,140,000
Virginia	1,140,000
Planning, Engineering, and Design:	
Maryland	250,000
Virginia	250,000
Construction Management:	
Maryland	110,000
Virginia	110,000
Total	3,000,000

Division: North Atlantic District: Baltimore Chesapeake Bay Oyster Recovery, MD and

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

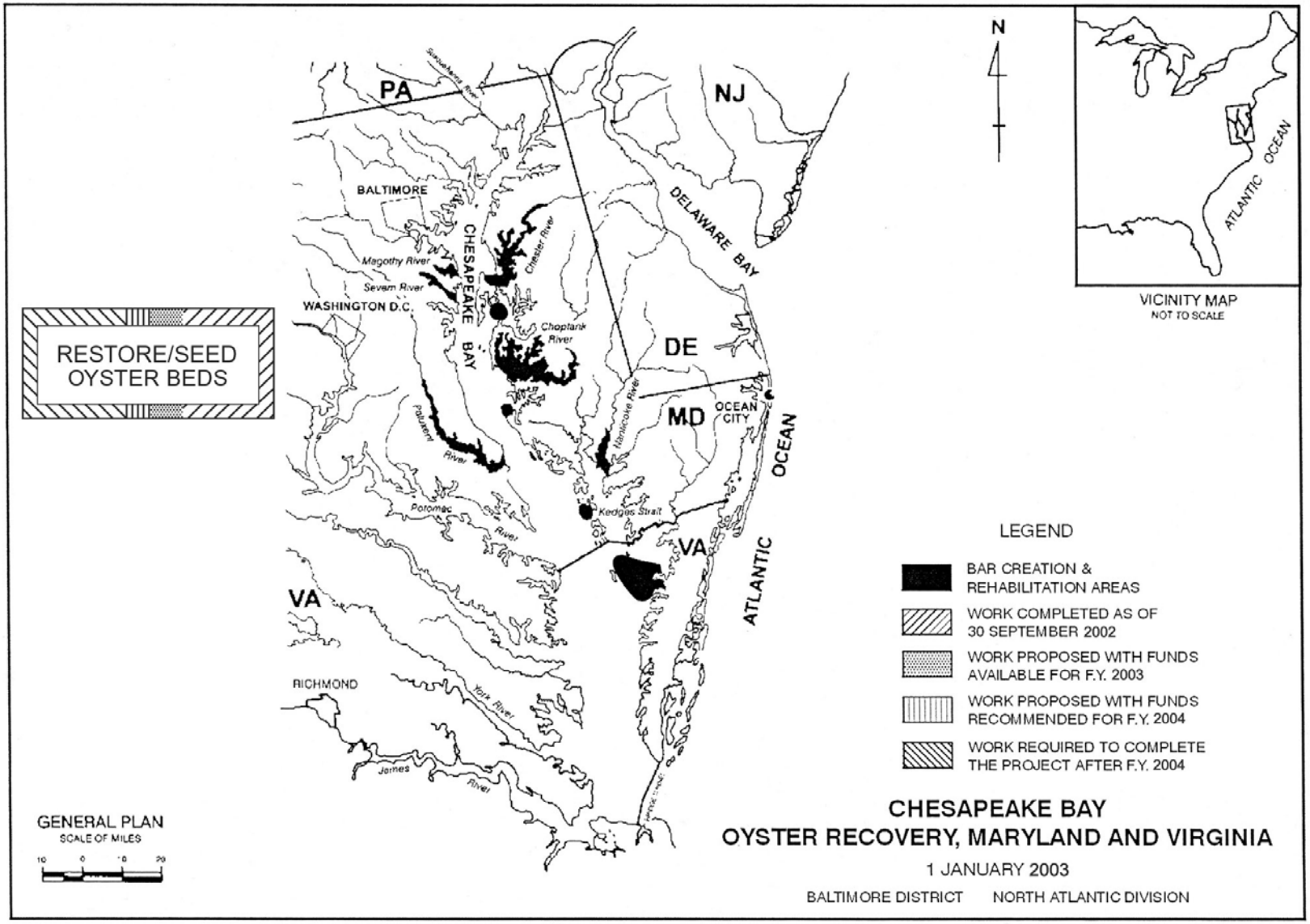
Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Pay 25 percent of the cost allocated to fish and wildlife restoration (by work-in-kind credits) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of fish and wildlife facilities.	$6,667,000	$0
Total Non-Federal Costs	$6,667,000	

STATUS OF LOCAL COOPERATION: The State of Maryland and the Commonwealth of Virginia are the non-Federal project sponsors. The Project Cooperation Agreement between the Corps of Engineers and the State of Maryland was executed in February 1997. An amendment to this Project Cooperation Agreement was executed in July 2002. The Project Cooperation Agreement between the Corps and the Commonwealth of Virginia was executed in September 2001. To date, the States have fully complied with the requirements of local cooperation.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal estimate of $20,000,000 is the same as the latest estimate ($20,000,000) presented to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment and finding of no significant impact was completed in January 1996 for the Maryland activities. Supplemental environmental information for the Maryland activities was completed in July 1999 and June 2002. A separate environmental assessment and finding of no significant impacts was prepared in spring of 2001 for the Virginia activities.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1995.


RESTORE/SEED
OYSTER BEDS
PA
NJ
DE
MD
VA
VA
BALTIMORE
WASHINGTON D.C.
CHESAPEAKE BAY
DELAWARE BAY
Susquehanna River
Chester River
Magothy River
Severn River
Choptank River
Patuxent River
Nanticoke River
Potomac River
Kedges Strait
OCEAN CITY
OCEAN
ATLANTIC
RICHMOND
York River
James River
N
ATLANTIC OCEAN
VICINITY MAP
NOT TO SCALE
LEGEND
BAR CREATION & REHABILITATION AREAS
WORK COMPLETED AS OF 30 SEPTEMBER 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR F.Y. 2003
WORK PROPOSED WITH FUNDS RECOMMENDED FOR F.Y. 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2004
GENERAL PLAN
SCALE OF MILES
10 0 10 20
CHESAPEAKE BAY
OYSTER RECOVERY, MARYLAND AND VIRGINIA
1 JANUARY 2003
BALTIMORE DISTRICT NORTH ATLANTIC DIVISION

APPROPRIATION TITLE: Construction, General - Environmental Restoration

PROJECT: Poplar Island, Maryland (Continuing)

LOCATION: Poplar Island is a group of islands located in the upper middle Chesapeake Bay approximately 34 nautical miles southeast of the Port of Baltimore.

DESCRIPTION: The project consists of reconstructing Poplar Island to its approximate size in 1847 (1,140 acres), using an estimated 38 million cubic yards of uncontaminated dredged material from maintenance dredging of the southern approach channels of the Baltimore Harbor and Channels navigation project. This will be accomplished through the construction of approximately 35,000 feet of dikes to contain the dredged material necessary to form the low and high marsh wetlands and upland habitat and to protect the 1,140-acre dredged material placement area from the severe wave activity in this region of the Chesapeake Bay.

AUTHORIZATION: Water Resources Development Acts of 1996 and 2000.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA			ACCUM PCT. OF EST. FED COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		254,000,000				
Estimated Non-Federal Cost:		84,000,000		Entire Project	50	TBD
Cash Contributions	45,963,000					
Other Costs	38,037,000					
Total Estimated Project Cost		338,000,000				

Division: North Atlantic District: Baltimore Poplar Island, Maryland

SUMMARIZED FINANCIAL DATA:(CONT'D)

Allocations to 30 September 2002	105,943,000
Conference Allowance for FY 2003	TBD
Allocation for FY 2003	TBD
Allocations through FY 2003	TBD
Allocation Requested for FY 2004	14,101,000
Programmed Balance to Complete after FY 2004	TBD
Unprogrammed balance to Complete after FY 2004	TBD

PHYSICAL DATA

Earth dikes	35,000 feet
Wetlands created	555 acres
Uplands created	555 acres
Submerged aquatic vegetation	1,000 acres

JUSTIFICATION: Valuable island habitat at Poplar Island is being lost through erosion. Islands are preferentially selected by many fish and wildlife species as nesting/production areas. The lack of human disturbance and fewer predators make islands more productive. Poplar Island is currently eroding at more than 13 feet per year and will disappear by the turn of the century. The plan to restore the island using uncontaminated dredged material from maintenance dredging of the Baltimore Harbor and Channels navigation project has been developed through the cooperative efforts of many state and Federal agencies, as well as private organizations. The Port of Baltimore is rapidly reaching a point where available placement area capacity will be insufficient to meet the port's dredging needs. A disruption in the constant maintenance that is required to keep the Port of Baltimore operational would result in significant adverse effects to both the local and national economy.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Dredging	$10,401,000
Planning, Engineering, and Design	1,000,000
Construction Management	200,000
Dike and Infrastructure	2,500,000
Total	$14,101,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

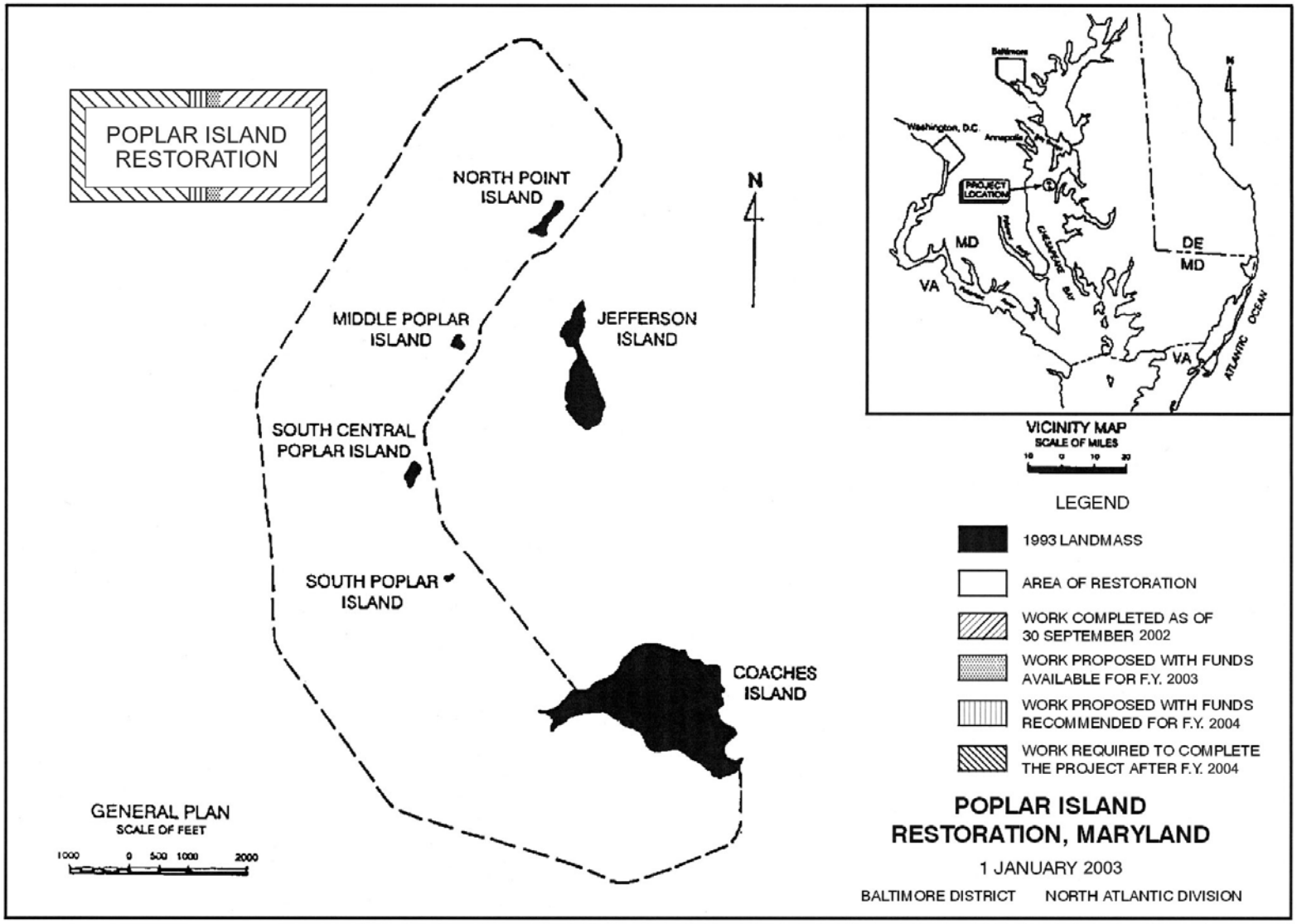
Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Provide lands, easements, and rights-of-way	$ 37,000	
Pay 25 percent of the cost allocated to fish & wildlife restoration (including $38,000,000 in credits for in-kind services and materials) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of fish and wildlife facilities.	83,963,000	430,000
Total Non-Federal Costs	$84,000,000	430,000

STATUS OF LOCAL COOPERATION: The State of Maryland is the non-Federal sponsor. By letter dated 16 May 1996, the State of Maryland stated its intent to be the non-Federal sponsor and participate in project cost sharing in accordance with the Water Resources Development Act of 1986. The Project Cooperation Agreement was executed in April 1997 and amended 9 April 2002 to reflect in-kind services authorized by the Water Resources Development Act of 2000. To date, the State has fully complied with the local requirements on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $254,000,000 is the same as the latest estimate ($254,000,000) presented to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The EIS was distributed for review and was finalized in February 1996 under the authority of Section 204 of the Water Resources Development Act of 1992.

OTHER INFORMATION: Planning for this project was accomplished under the authority of Section 204 of the Water Resources Development Act of 1992. The feasibility study was initiated in September 1994, completed in February 1996, and approved by the Assistant Secretary of the Army for Civil Works in September 1996. Funds to initiate construction were appropriated in FY 1997.


POPLAR ISLAND RESTORATION
NORTH POINT ISLAND
MIDDLE POPLAR ISLAND
JEFFERSON ISLAND
SOUTH CENTRAL POPLAR ISLAND
SOUTH POPLAR ISLAND
COACHES ISLAND
N
GENERAL PLAN
SCALE OF FEET
1000 0 500 1000 2000
Baltimore
Washington, D.C.
Annapolis
PROJECT LOCATION
MD
VA
DE
MD
VA
CHESAPEAKE BAY
ATLANTIC OCEAN
VICINITY MAP
SCALE OF MILES
LEGEND
1993 LANDMASS
AREA OF RESTORATION
WORK COMPLETED AS OF 30 SEPTEMBER 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR F.Y. 2003
WORK PROPOSED WITH FUNDS RECOMMENDED FOR F.Y. 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2004
POPLAR ISLAND RESTORATION, MARYLAND
1 JANUARY 2003
BALTIMORE DISTRICT NORTH ATLANTIC DIVISION

APPROPRIATION TITLE: Construction, General - Major Rehabilitation - Navigation

PROJECT: Cape Cod Canal Railroad Bridge, Massachusetts (Continuing)

LOCATION: The Cape Cod Canal is located about 50 miles south of Boston, Massachusetts, and extends from Cape Cod Bay 7.7 miles to Buzzards Bay. The railroad bridge is located close to the western end of the Canal near Buzzards Bay and provides rail access across the Canal.

DESCRIPTION: The bridge is 806 feet long and carries a single track on an open timber tie deck across the Cape Cod Canal. The bridge was constructed in 1935 and consists of a 550-foot moveable center span, flanked by a tower and 128-foot fixed span at each end. The bridge is normally kept in the raised position, with a vertical clearance of about 136 feet above mean high water to allow passage of marine traffic. The plan for rehabilitation includes replacement of the counterweight cables, counterweight trunion bearings, electrical control system and main switchboard; repair or replacement of steel members; and cleaning and painting of the steel superstructure. All work is programmed.

AUTHORIZATION: The existing Cape Cod Canal project is authorized by the Rivers and Harbors Act of 1935. Authorization to construct three bridges, two vehicular and one railroad, was included in the Public Works Administration Program of 1933.

REMAINING BENEFIT-REMAINING COST RATIO: 5.4 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 4.6 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 4.6 to 1 at 7 1/8 percent (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits are based on a supplemental economic analysis to the Major Rehabilitation Report, Vertical Lift Railroad Bridge, Cape Cod Canal, Massachusetts, dated May 1997 at April 1997 price levels.

SUMMARIZED FINANCIAL DATA		ACCUMULATED PCT. OF EST. FED COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$31,600,000		Phase I	95	February 2003
Estimated Non-Federal Cost	0		Phase II	10	March 2004
Total Estimated Project Cost	$31,600,000 1/		Entire Project	45	March 2004

1/ Excludes $300,000 in design funded by Operations & Maintenance Appropriation.

Division: North Atlantic District: New England Cape Cod Canal Railroad Bridge, MA

SUMMARIZED FINANCIAL DATA (Continued)		ACCUMULATED PCT OF EST FED COST	PHYSICAL DATA
Allocations to 30 September 2002	$13,905,000		Phase I
Conference Allowance for FY 2003	8,500,000		Repair or replace steel members.
Allocation for FY 2003	7,800,000 1/		Clean and paint steel superstructure.
Allocations through FY 2003	21,705,000	69	Phase II
Allocation Requested for FY 2004	9,895,000	100	Replace counterweight cables and trunion bearings.
Programmed Balance to Complete After FY 2004	0		Replace electrical control system and main switchboard.
Unprogrammed Balance to Complete After FY 2004	0		

1/ Reflects $700,000 assigned as savings and slippage.

JUSTIFICATION: The railroad bridge is a critical link connecting Cape Cod with the mainland of southeastern Massachusetts. The bridge is used primarily for waste removal with an average of four crossings per day, six days a week. Waste removal is extremely important as there are no refuse disposal facilities on Cape Cod and train service is the most economical method of transport. During the tourist season, the bridge is also used by passenger trains with service from New York. An inspection and condition report performed in 1984 revealed the need for major rehabilitation of the bridge to ensure reliable operation of the structure. An August 1995 inspection confirmed the critical need for rehabilitation work to arrest further deterioration and possible bridge replacement. Federal interest in the major rehabilitation of the Cape Cod Canal Railroad Bridge is contained in Article 16 of the 1935 Agreement with the railroad which states "It is understood and agreed that the Government shall sustain the obligation of the operation, maintenance, renewals and repairs of said new railroad bridge...". Failure of the bridge in the down position would close the canal to marine traffic for up to a year. Marine traffic would need to be rerouted around Cape Cod greatly increasing shipping costs and reducing navigational safety. Average annual benefits for the major rehabilitation project are $51,000,000 at April 1997 prices.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Complete Phase II of Construction	$ 9,320,000
Planning, Engineering and Design	80,000
Construction Management	495,000
Total	$ 9,895,000

Division: North Atlantic District: New England Cape Cod Canal Railroad Bridge, MA

NON-FEDERAL COSTS: None Required.

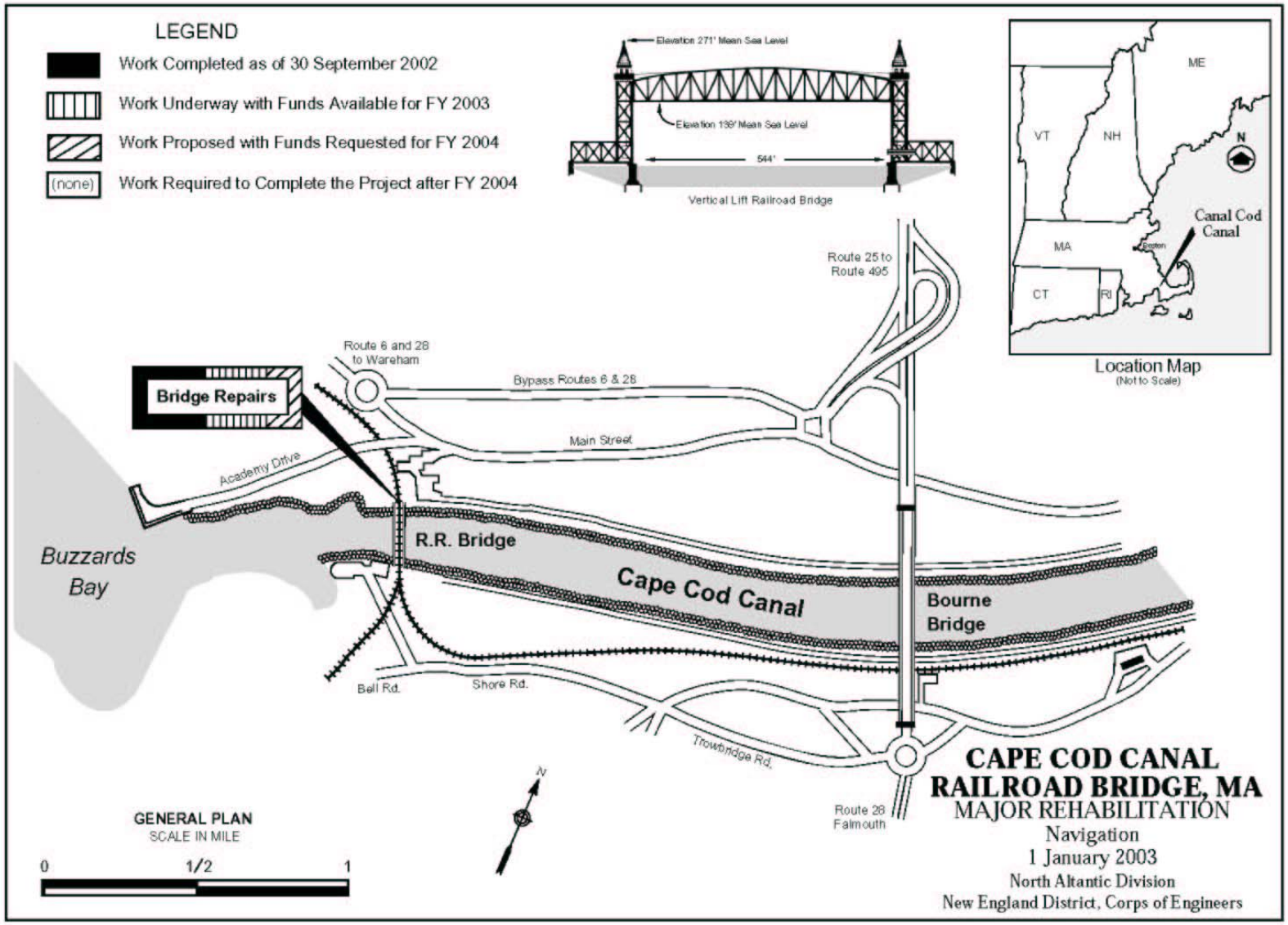
STATUS OF LOCAL COOPERATION: None Required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $31,600,000 is an increase of $400,000 from the latest estimate ($31,200,000) submitted to Congress (FY 2003). This change includes the following items:

Item	Amount
Post Contract Award and Other Estimating Adjustments	$ 400,000
Total	$ 400,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and Finding of No Significant Impact were completed in May 1997.

OTHER INFORMATION: Preconstruction Engineering and Design (PED) efforts were initiated in Fiscal Year 1999 using Operation and Maintenance Appropriation funds. Funds to initiate construction were appropriated in FY 2000.


LEGEND
Work Completed as of 30 September 2002
Work Underway with Funds Available for FY 2003
Work Proposed with Funds Requested for FY 2004
(none)
Work Required to Complete the Project after FY 2004
Elevation 271' Mean Sea Level
Elevation 139' Mean Sea Level
544'
Vertical Lift Railroad Bridge
ME
VT
NH
N
Canal Cod Canal
MA
Boston
CT
RI
Location Map
(Not to Scale)
Route 25 to Route 495
Route 6 and 28 to Wareham
Bypass Routes 6 & 28
Bridge Repairs
Main Street
Academy Drive
R.R. Bridge
Cape Cod Canal
Bourne Bridge
Buzzards Bay
Bell Rd.
Shore Rd.
Trowbridge Rd.
Route 28 Falmouth
GENERAL PLAN
SCALE IN MILE
0
1/2
1
CAPE COD CANAL
RAILROAD BRIDGE, MA
MAJOR REHABILITATION
Navigation
1 January 2003
North Atlantic Division
New England District, Corps of Engineers

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2004

1. Navigation

a. Channels and Harbors

The budget estimate of **$ 147,613,000** provides for essential operation and maintenance work on **64** channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and dredged material disposal areas, facilities protection, snagging and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for change in Operations from FY 2003 to FY 2004 (10% +/-) 2. Major Maintenance items budgeted in FY 2004 (Threshold $ 1,000,000)
Delaware			
IWW, from Delaware River to Chesapeake Bay, DE & MD	12,853,000 (2,673,000) (10,180,000)	14,994,000 (2,618,000) (12,376,000)	1. None. 2. Dredge navigation channel and annual maintenance of navigation facilities.
IWW Rehoboth Bay to Delaware Bay	45,000 (45,000) (0)	48,000 (48,000) (0)	1. None. 2. None.
Wilmington Harbor	4.966,000 (65,000) (4,901,000)	4,366,000 (75,000) (4,291,000)	1. Increase in plant rental for channel survey. 2. Dredge navigation channel and repair disposal area dikes.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
District of Columbia			
Washington Harbor	50,000	50,000	
	(0)	(0)	1. None.
	(50,000)	(50,000)	2. None.
Maine			
Kennebec River	0	45,000	
	(0)	(0)	1. None.
	(0)	(45,000)	2. None.
Wells Harbor	0	50,000	
	(0)	(0)	1. None.
	(0)	(50,000)	2. None.
Maryland			
Baltimore Harbor Anchorages and Channels	0	68,000	
	(0)	(68,000)	1. Perform channel survey.
	(0)	(0)	2. None.
Baltimore Harbor and Channels	18,444,000	18,416,000	
	(2,697,000)	2,534,000	1. None.
	(15,747,000)	15,882,000	2. Dredge navigation channel.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Maryland (Cont'd)			
Chester River	0 (0) (0)	930,000 (0) (930,000)	1. None. 2. None.
Honga River and Tar Bay	930,000 (0) (930,000)	80,000 (0) (80,000)	1. None. 2. None.
Knapps Narrows	0 (0) (0)	651,000 (0) (651,000)	1. None. 2. None.
Ocean City Harbor and Inlet and Sinepuxent Bay	1,627,000 (0) (1,627,000)	960,000 (0) (960,000)	1. None. 2. None.
Pocomoke River	619,000 (0) (619,000)	989,000 (0) (989,000)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004(Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Maryland (Cont'd)			
Tolchester Channel	180,000 (0) (180,000)	1,364,000 (17,000) (1,347,000)	1. None. 2. Dredge navigation channel.
Wicomico River	604,000 (0) (604,000)	1,514,000 (0) (1,514,000)	1. None. 2. Dredge navigation channel.
Massachusetts			
Aunt Lydia’s Cove	418,000 (0) (418,000)	300,000 (0) (300,000)	1. None. 2. None.
Boston Harbor	0 (0) (0)	3,000,000 (0) (3,000,000)	1. None. 2. Dredge navigation channel.
Cape Cod Canal	7,659,000 (4,126,000) (3,533,000)	7,772,000 (4,112,000) (3,660,000)	1. None. 2. Annual maintenance of navigation and recreation features and highway and railroad bridges.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Massachusetts (Cont'd)			
Green Harbor	418,000 (0) (418,000)	310,000 (0) (310,000)	1. None. 2. None.
New Jersey			
Barnegat Inlet	1,750,000 (0) (1,750,000)	1,520,000 (0) (1,520,000)	1. None. 2. Dredge navigation channel.
Cold Spring Inlet	425,000 (0) (425,000)	500,000 (0) (500,000)	1. None. 2. None.
Delaware River at Camden	20,000 (20,000) (0)	20,000 (20,000) (0)	1. None. 2. None.
Delaware River, Philadelphia to the Sea, PA, NJ and DE	19,245,000 (1,350,000) (17,895,000)	19,290,000 (1,675,000) (17,615,000)	1. Increase in plant rental for channel survey. 2. Dredge navigation channel and maintain dredged material disposal site.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
New Jersey (Cont'd)			
Delaware River, Philadelphia to Trenton, NJ	3,470,000 (400,000) (3,070,000)	3,615,000 (570,000) (3,045,000)	1. Increase in plant rental for channel survey. 2. Dredge navigation channel.
New Jersey Intracoastal Waterway	2,586,000 (490,000) (2,096,000)	1,815,000 (635,000) (1,180,000)	1. Increase in plant rental for channel survey. 2. Dredge navigation channel.
Newark Bay, Hackensack, & Passaic Rivers	75,000 (0) (75,000)	100,000 (0) (100,000)	1. None. 2. None.
Raritan River	0 (0) (0)	450,000 (0) (450,000)	1. None. 2. None.
Sandy Hook Bay at Leonardo	0 (0) (0)	70,000 (0) (70,000)	1. None. 2. None.
Shark River	590,000 (0) (590,000)	70,000 (0) (70,000)	1. None. 2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
New York			
Browns Creek	0 (0) (0)	80,000 (0) (80,000)	1. None. 2. None.
Buttermilk Channel	300,000 (0) (300,000)	300,000 (0) (300,000)	1. None. 2. None.
East Rockaway Inlet	2,100,000 (0) (2,100,000)	140,000 (0) (140,000)	1. None. 2. None.
Fire Island Inlet to Jones Inlet	175,000 (0) (175,000)	2,350,000 (0) (2,350,000)	1. None. 2. Dredge navigation channel.
Glen Cove Creek	80,000 (0) (80,000)	100,000 (0) (100,000)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
New York (Cont'd)			
Hudson River Channel	80,000 (0) (80,000)	350,000 (0) (350,000)	1. None. 2. None.
Hudson River (Maintenance)	2,245,000 (450,000) (1,795,000)	2,510,000 (450,000) (2,060,000)	1. None. 2. Dredge navigation channel.
Hudson River (O&C)	3,170,000 (1,030,000) (2,140,000)	2,935,000 (985,000) (1,950,000)	1. None. 2. Concrete repairs to Troy Lock North and South Guidewalls.
Jamaica Bay	1,420,000 (0) (1,420,000)	140,000 (0) (140,000)	1. None. 2. None.
Long Island Intra-Coastal Waterway	1,284,000 (0) (1,284,000)	2,000,000 (0) (2,000,000)	1. None 2. Dredge navigation channel.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
New York (Cont'd)			
Moriches Inlet	600,000 (0) (600,000)	30,000 (0) (30,000)	1. None. 2. None.
New York and New Jersey Channels	3,835,000 (0) (3,835,000)	3,660,000 (0) (3,660,000)	1. None. 2. Dredge navigation channel.
New York Harbor	3,720,000 (1,620,000) (2,100,000)	4,460,000 (1,620,000) (2,840,000)	1. None. 2. Dredge navigation channel.
Roundout Harbor	0 (0) (0)	150,000 (0) (150,000)	1. None. 2. None.
Sag Harbor	2,500,000 (0) (2,500,000)	100,000 (0) (100,000)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
New York (Cont'd)			
Shinnecock Inlet	1,346,000	416,000	
	(0)	(0)	1. None.
	(1,346,000)	(416,000)	2. None.
Pennsylvania			
Schuylkill River	50,000	1,360,000	
	(50,000)	(60,000)	1. Increase in plant rental for channel survey.
	(0)	(1,300,000)	2. None.
Rhode Island			
Providence River & Harbor	8,220,000	21,000,000	
	(0)	(0)	1. None.
	(8,220,000)	(21,000,000)	2. Dredge navigation channel.
Vermont			
Narrows of Lake Champlain	95,000	50,000	
	(60,000)	(10,000)	1. Cultural resources study in FY03.
	(35,000)	(40,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Virginia			
Atlantic Intracoastal Waterway (ACC)	2,035,000 (1,975,000) (60,000)	1,991,000 (1,900,000) (91,000)	1. None. 2. None.
Atlantic Intracoastal Waterway (DSC)	1,159,000 (919,000) (240,000)	1,033,000 (925,000) (108,000)	1. None. 2. None.
Bonum Creek	0 (0) (0)	705,000 (0) (705,000)	1. None. 2. None.
Cape Charles City Harbor	0 (0) (0)	25,000 (0) (25,000)	1. None. 2. None.
Chincoteague Inlet	1,124,000 (40,000) (1,084,000)	915,000 (40,000) (875,000)	1. None. 2. None.
Hampton Creek	0 (0) (0)	733,000 (0) (733,000)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Virginia (Cont'd)			
Hoskins Creek	0	1,479,000	
	(0)	(0)	1. None.
	(0)	(1,479,000)	2. Dredge navigation channel.
James River Channel	3,801,000	3,107,000	
	(300,000)	(315,000)	1. None.
	(3,501,000)	(2,792,000)	2. Dredge navigation channel.
Lynnhaven Inlet	225,000	200,000	
	(225,000)	(200,000)	1. None.
	(0)	(0)	2. None.
Monroe Bay and Creek	0	422,000	
	(0)	(0)	1. None.
	(0)	(422,000)	2. None.
Norfolk Harbor	8,679,000	7,115,000	
	(570,000)	(585,000)	1. None.
	(8,109,000)	(6,530,000)	2. Dredge navigation channel, raise dikes and levees at Craney Island.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Virginia (Cont'd)			
Oyster Channel	0 (0) (0)	310,000 (0) (310,000)	1. None. 2. None.
Quinby Creek	400,000 (0) (400,000)	40,000 (0) (40,000)	1. None. 2. None.
Rudee Inlet	1,030,000 (0) (1,030,000)	1,180,000 (0) (1,180,000)	1. None. 2. Dredge navigation channel.
Waterway on the Coast of Virginia	1,150,000 (190,000) (960,000)	1,285,000 (205,000) (1,080,000)	1. None. 2. Dredge navigation channel.
York River	0 (0) (0)	1,585,000 (0) (1,585,000)	1. None. 2. Dredge navigation channel.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

1. Navigation (Cont'd)

a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Other Projects	16,867,000	0	
Maintained Periodically	(0)	(0)	
	(16,867,000)	(0)	
Total-Channels & Harbors	**144,664,000**	**147,613,000**	
	(19,495,000)	**(19,667,000)**	
	(125,169,000)	**(127,946,000)**	

b. Locks and Dams: NONE

TOTAL NAVIGATION	**144,664,000**	**147,613,000**	
	(19,495,000)	**(19,667,000)**	
	(125,169,000)	**(127,946,000)**	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control

a. Reservoirs

The budget estimate of **$38,049,000** provides for the operation of **51** flood control reservoirs. Requirements include: operation and ordinary maintenance of project facilities, facility security; labor, supplies, materials, and parts for day-to-day functioning; periodic maintenance, repairs and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total	Total	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
Connecticut			
Black Rock Lake	364,000	343,000	
	(309,000)	(301,000)	1. None
	(55,000)	(42,000)	2. None.
Colebrook River Lake	506,000	459,000	
	(403,000)	(393,000)	1. None.
	(103,000)	(66,000)	2. None.
Hancock Brook Lake	284,000	252,000	
	(207,000)	(198,000)	1. None.
	(77,000)	(54,000)	2. None.
Hop Brook Lake	906,000	857,000	
	(662,000)	(652,000)	1. None.
	(244,000)	(205,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Connecticut (Cont'd)			
Mansfield Hollow Lake	447,000 (302,000) (145,000)	406,000 (260,000) (146,000)	1. Reduction in natural resource management activities. 2. None.
Northfield Brook Lake	337,000 (264,000) (73,000)	330,000 (270,000) (60,000)	1. None. 2. None.
Thomaston Dam	565,000 (463,000) (102,000)	442,000 (373,000) (69,000)	1. Reduction in natural resource management activities. 2. None.
West Thompson Lake	506,000 (349,000) (157,000)	452,000 (294,000) (158,000)	1. Reduction in natural resource management activities. 2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Maryland			
Jennings Randolph Lake	1,653,000 (1,461,000) (192,000)	1,774,000 (1,570,000) (204,000)	1. None. 2. None.
Massachusetts			
Barre Falls Dam	533,000 (436,000) (97,000)	486,000 (399,000) (87,000)	1. None. 2. None.
Birch Hill Dam	498,000 (415,000) (83,000)	450,000 (382,000) (68,000)	1. None. 2. None.
Buffumville Lake	431,000 (290,000) (141,000)	447,000 (290,000) (157,000)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Massachusetts (Cont'd)			
Charles River Natural Valley Storage Area	260,000	227,000	
	(220,000)	(182,000)	1. Reduction in natural resource management activities.
	(40,000)	(45,000)	2. None.
Conant Brook Lake	174,000	171,000	
	(110,000)	102,000)	1. None.
	(64,000)	(69,000)	2. None.
East Brimfield Lake	313,000	301,000	
	(230,000)	(210,000)	1. None.
	(83,000)	(91,000)	2. None.
Hodges Village Dam	416,000	428,000	
	(282,000)	(276,000)	1. None.
	(134,000)	(152,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Massachusetts (Cont'd)			
Knightville Dam	483,000 (387,000) (96,000)	453,000 (374,000) (79,000)	1. None. 2. None.
Littleville Lake	441,000 (379,000 (62,000)	364,000 (312,000) (52,000)	1. Reduction in natural resource management activities. 2. None.
Tully Lake	486,000 (362,000) (124,000)	412,000 (323,000) (89,000)	1. Reduction in natural resource management activities. 2. None.
West Hill Dam	657,000 (419,000) (238,000)	573,000 (387,000) (186,000)	1. None. 2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Massachusetts (Cont'd)			
Westville Lake	406,000 (279,000) (127,000)	407,000 (266,000) (141,000)	1. None. 2. None.
New Hampshire			
Blackwater Dam	454,000 (367,000) (87,000)	461,000 (379,000) (82,000)	1. None. 2. None.
Edward MacDowell Lake	490,000 (399,000) (91,000)	481,000 (398,000) (83,000)	1. None. 2. None.
Franklin Falls Dam	496,000 (395,000) (101,000)	500,000 (413,000) (87,000)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
New Hampshire (Cont'd)			
Hopkinton-Everett Lakes	1,074,000 (875,000) (199,000)	887,000 (712,000) (175,000)	1. Reduction in natural resource management activities. 2. None.
Otter Brook Lake	577,000 (385,000) (192,000)	537,000 (294,000) (243,000)	1. Reduction in natural resource management activities. 2. None.
Surry Mountain Lake	575,000 (352,000) (223,000)	498,000 (271,000) (227,000)	1. Reduction in natural resource management activities. 2. None.
New York			
Almond Lake	457,000 (416,000) (41,000)	471,000 (423,000) (48,000)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
New York (Cont'd)			
Arkport Dam	246,000	275,000	
	(223,000)	(252,000)	1. Sediment survey in FY 2004.
	(23,000)	(23,000)	2. None.
East Sidney Lake	501,000	500,000	
	(401,000)	(393,000)	1. None.
	(100,000)	(107,000)	2. None.
Whitney Point Lake	705,000	1,044,000	
	(451,000)	(481,000)	1. None.
	(254,000)	(563,000)	2. None.
Pennsylvania			
Alvin R. Bush Dam	630,000	712,000	
	(509,000)	(582,000)	1. Conduct periodic inspection of the project and bridges in FY 2004.
	(121,000)	(130,000)	2. None.
Aylesworth Creek Lake	270,000	254,000	
	(248,000)	(232,000)	1. None.
	(22,000)	(22,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Pennsylvania (Cont'd)			
Beltzville Lake	1,171,000 (1,151,000 (20,000)	1,095,000 (1,074,000) (21,000)	 1. None. 2. None.
Blue Marsh Lake	2,513,000 (2,491,000) (22,000)	2,810,000 (2,167,000) (643,000)	 1. Reduction in water quality management. 2. None.
Cowanesque Lake	1,915,000 (1,315,000) (600,000)	3,118,000 (1,439,000) (1,679,000)	 1. None. 2. None.
Curwensville Lake	722,000 (598,000) (124,000)	743,000 (610,000) (133,000)	 1. None. 2. None.
Foster Joseph Sayers Dam	775,000 (657,000) (118,000)	789,000 (661,000) (128,000)	 1. None. 2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Pennsylvania (Cont'd)			
Francis E. Walter Dam	782,000 (767,000) (15,000)	681,000 (666,000) (15,000)	1. Reduction in water quality management. 2. None.
General Edgar Jadwin Dam and Reservoir	341,000 (341,000) (0)	348,000 (348,000) (0)	1. None. 2. None.
Prompton Lake	506,000 (501,000) (5,000)	455,000 (450,000) (5,000)	1. None. 2. None.
Raystown Lake	3,941,000 (2,404,000) (1,537,000)	5,674,000 (2,498,000) (3,176,000)	1. None. 2. Increased project security requirements and conduct recreational facility maintenance.
Stillwater Lake	392,000 (347,000) (45,000)	385,000 (333,000) (52,000)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Pennsylvania (Cont'd)			
Tioga-Hammond Lakes	2,542,000 (1,716,000) (826,000)	3,852,000 (1,777,000) (2,075,000)	 1. None. 2. None.
York Indian Rock Dam	543,000 (481,000) (62,000)	691,000 (621,000) (70,000)	 1. Conduct periodic inspection of the project and bridges and sediment survey in FY 2004 2. None.
Vermont			
Ball Mountain Lake	705,000 (404,000) (301,000)	651,000 (359,000) (292,000)	 1. Reduction in natural resource management activities. 2. None.
North Hartland Lake	576,000 (345,000) (231,000)	582,000 (355,000) (227,000)	 1. None. 2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Vermont (Cont'd)			
North Springfield Lake	647,000 (408,000) (239,000)	621,000 (385,000) (236,000)	 1. None. 2. None.
Townshend Lake	687,000 (411,000) (276,000)	595,000 (317,000) (278,000)	 1. Reduction in natural resource management activities. 2. None.
Union Village Dam	538,000 (341,000) (197,000)	545,000 (330,000) (215,000)	 1. None. 2. None.
Virginia			
Gathright Dam and Lake Moomaw	1,612,000 (965,000) (647,000)	1,756,000 (1,491,000) (265,000)	 1. None. 2. None.
Total reservoirs	**38,049,000** **(28,893,000)** **(9,156,000)**	**42,045,000** **(28,525,000)** **(13,520,000)**	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

a. Reservoirs (Cont'd)

Scheduling Reservoir Operations

The **$153,000** requested in FY 2004 supports preparation, review and updating of water control manuals, real-time data collection to monitor hydrologic conditions, and the issuance of gate regulation instructions as necessary at **2** non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Maryland	91,000 (91,000) (0)	96,000 (93,000) (3,000)	1. None. 2. None.
Pennsylvania	60,000 (60,000) (0)	57,000 (54,000) (3,000)	1. None. 2. None.
Total Scheduling of Reservoir Operations	**151,000** **(151,000)** **(0)**	**153,000** **(147,000)** **(6,000)**	
Total Reservoirs and Scheduling of Reservoir Operations	**38,200,000** **(29,044,000)** **(9,156,000)**	**42,198,000** **(28,672,000)** **(13,526,000)**	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

b. Channel Improvements

The budget estimate of **$2,017,000** provides for the essential annual requirement of **5** local flood protection projects, including **10** separate units of the Southern New York projects.

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Connecticut			
Stamford Hurricane Barrier	349,000 (275,000) (74,000)	353,000 (263,000) (90,000)	1. None. 2. None.
Maryland			
Cumberland, MD and Ridgeley, WV	168,000 (168,000) (0)	165,000 (165,000) (0)	1. None. 2. None.
Massachusetts			
New Bedford, Fairhaven & Acushnet Hurricane Barrier	322,000 (144,000) (178,000)	300,000 (142,000) (158,000)	1. None. 2. None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

Channel Improvements (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
New Jersey			
Passaic River Flood Flood Warning System	425,000 (425,000) (0)	425,000 (425,000) (0)	1. None. 2. None.
New York			
Southern New York Projects	760,000 (230,000) (530,000)	774,000 (234,000) (540,000)	1. None. 2. None.
Total Channel Improvements	**2,024,000** **(1,242,000)** **(782,000)**	**2,017,000** **(1,229,000)** **(788,000)**	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

b. Channel Improvements (Cont'd)

Inspection of Completed Works and Miscellaneous Maintenance

The **$ 940,000** requested in FY 2004 supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, and floodwalls. drainage structures and pumping plants.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Connecticut	35,000 (35,000) (0)	81,000 (81,000) (0)	1. Increase in projects to be inspected. 2. None.
District of Columbia	7,000 (7,000) (0)	7,000 (7,000) (0)	1. None. 2. None.
Maine	16,000 (16,000) (0)	17,000 (17,000) (0)	1. None. 2. None.
Maryland	34,000 (34,000) (0)	34,000 (34,000) (0)	1. None. 2. None.
Massachusetts	112,000 (112,000) (0)	114,000 (114,000) (0)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

b. Channel Improvements (Cont'd)

Inspection of Completed Works and Miscellaneous Maintenance (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
New Hampshire	11,000 (11,000) (0)	12,000 (12,000) (0)	1. None. 2. None.
New Jersey	65,000 (65,000) (0)	89,000 (89,000) (0)	1. Increase in projects to be inspected. 2. None.
New York	358,000 (358,000) (0)	264,000 (264,000) (0)	1. Decrease in projects to be inspected. 2. None.
Pennsylvania	140,000 (140,000) (0)	142,000 (142,000) (0)	1. None. 2. None.
Rhode Island	6,000 (6,000) (0)	6,000 (6,000) (0)	1. None. 2. None.
Vermont	26,000 (26,000) (0)	42,000 (42,000) (0)	1. Increase in projects to be inspected. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

2. Flood Control (Cont'd)

b. Channel Improvements (Cont'd)

Inspection of Completed Works and Miscellaneous Maintenance (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Virginia	111,000 (111,000) (0)	111,000 (111,000) (0)	1. None. 2. None.
West Virginia	20,000 (20,000) (0)	21,000 (21,000) (0)	1. None. 2. None.
Total Inspection and Miscellaneous Maintenance	**941,000** **(941,000)** **(0)**	**940,000** **(940,000)** **(0)**	
Total Channel Improvements, Inspections and Miscellaneous Maintenance	**2,965,000** **(2,183,000)** **(782,000)**	**2,957,000)** **(2,169,000)** **(788,000)**	
TOTAL-FLOOD CONTROL	**41,165,000** **(31,227,000)** **(9,938,000)**	**45,155,000** **(30,841,000)** **(14,314,000)**	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

3. Multiple Purpose Power Projects - NONE

4. Protection of Navigation

The budget estimate of **$9,770,000** provides for accomplishing the work essential to the administration and enforcement of specific laws enacted for the protection of navigation, including the prevention of obstructive and injurious deposits in the tidal waters of three major harbors; removal of drift and debris.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2003 ($)	FY 2004 ($)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Prevention of Obstructive and Injurious Deposits:			
Baltimore Harbor, MD	663,000 (663,000) (0)	676,000 (676,000) (0)	1. None. 2. None.
New York Harbor, NY & NJ	750,000 (750,000) (0)	750,000 (750,000) (0)	1. None. 2. None.
Norfolk Harbor, VA	200,000 (200,000) (0)	200,000 (200,000) (0)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

Protection of Navigation (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Collection and Removal of Drift:			
Baltimore Harbor Drift Removal, MD	500,000 (0) (500,000)	500,000 (0) (500,000)	1. None. 2. None.
New York Harbor Drift Removal, NY & NJ	5,300,000 (0) (5,300,000)	5,344,000 (0) (5,344,000)	1. None. 2. Removal of hazardous drift material.
Removal of Drift & Debris from the Potomac and Anacostia River, DC	1,110,000 (0) (1,110,000)	1,100,000 (0) (1,100,000)	1. None. 2. Removal of hazardous drift material.
Hampton Roads Drift Removal, VA	1,200,000 (0) (1,200,000)	1,200,000 (0) (1,200,000)	1. None. 2. Removal of hazardous drift material.
Total Protection of Navigation	**9,723,000** **(1,613,000)** **(8,110,000)**	**9,770,000** **(1,626,000)** **(8,144,000)**	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

4. Protection of Navigation (Cont'd)

a. Project Condition Surveys

The **$9,888,000** requested in FY 2004 supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the budget request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that the users can be advised of channel conditions and future maintenance can be scheduled.

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Connecticut	1,185,000 (1,185,000) (0)	1,303,000 (1,303,000) (0)	1. None. 2. None.
Delaware	50,000 (50,000) (0)	55,000 (55,000) (0)	1. None. 2. None.
District of Columbia	33,000 (33,000) (0)	35,000 (35,000) (0)	1. None. 2. None.
Maine	515,000 (515,000) (0)	1,886,000 (1,886,000) (0)	1. None. 2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

4. Protection of Navigation (Cont'd)

a. Project Condition Surveys (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Maryland	323,000	365,000	
	(323,000)	(365,000)	1. Variation in survey requirements.
	(0)	(0)	2. None.
Massachusetts	1,197,000	1,316,000	
	(1,197,000)	(1,316,000)	1. None.
	(0)	(0)	2. None.
New Hampshire	273,000	300,000	
	(273,000)	(300,000)	1. None.
	(0)	(0)	2. None.
New Jersey	782,000	785,000	
	(782,000)	(785,000)	1. None.
	(0)	(0)	2. None.
New York	893,000	930,000	
	(893,000)	(930,000)	1. None.
	(0)	(0)	2. None.

NORTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

4. Protection of Navigation (Cont'd)

a. Project Condition Surveys (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Rhode Island	330,000 (330,000) (0)	363,000 (363,000) (0)	1. None. 2. None.
Rhode Island Region Long-Term Dredge Disposal Evaluation	2,000,000 (2,000,000) (0)	1,800,000 (1,800,000) (0)	1. None. 2. None.
Virginia	749,000 (749,000) (0)	750,000 (750,000) (0)	1. None. 2. None.
Other projects periodically Surveyed	**2,655,000 (2,655,000) (0)**		
Total Project Condition Survey	**10,985,000 (10,985,000) (0)**	**9,888,000 (9,888,000) (0)**	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2004 (Cont'd)

4. Protection of Navigation (Cont'd)

b. Surveillance of Northern Boundary Waters.

The **$17,000** requested in FY 2004 supports meeting US obligations under provisions of boundary water treaties and other international agreements. Data collection includes current velocity measurements, presence and intensity of ice, water levels, land use patterns and estimating potential damages caused by extreme levels. This information can be used to enhance water level forecasts, develop crises response plans, and provide advance warning to area residents and waterway users of impending floods or ice jams.

STATE Project Name	ESTIMATED OBLIGATIONS FY 2003 ($) Total (Operations) (Maintenance)	 FY 2004 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
Maine			
International St. Croix River Board	17,000 (17,000) (0)	17,000 (17,000) (0)	1. None. 2. None.
Total Surveillance of Northern Boundary Waters	**17,000** **(17,000)** **(0)**	**17,000** **(17,000)** **(0)**	
Total Protect. of Navig., Project Condition Survey & Surveillance of Northern Boundary Waters	**20,725,000** **(12,615,000)** **(8,110,000)**	**19,675,000** **(11,531,000)** **(8,144,000)**	
GRAND TOTAL-NORTH ATLANTIC DIVISION	**206,554,000** **(63,337,000)** **(143,217,000)**	**212,443,000** **(62,039,000)** **(150,404,000)**	